XR-1300/1600

SERVICE MANUAL

E Model

Photo : XR-1600

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-707DVS-35

SPECIFICATIONS

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	30 W × 2 (at 4 ohms)

Cassette player section

Tape track	4-track 2-channel stereo
Frequency response	40 – 15,000 Hz
Signal-to-noise ratio	55 dB
Wow and flutter	0.13% (WRMS)

Tuner section

FM

Tuning range	FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	13 dBf (75 ohms)
Selectivity	65 dB at 400 kHz
Signal-to-noise ratio	63 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	0.9% (stereo), 0.5% (mono)
Separation	30 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	3 dB

AM

Tuning range	AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	32 µV

General

Tone	–8 dB at 10 kHz
Loudness (XR-1600)	+10 dB at 100 Hz +8 dB at 10 kHz
Bass boost (XR-1300)	+10 dB at 100 Hz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 170 mm (w/h/d), not incl. projecting parts and controls
Mounting dimensions	Approx. 182 × 53 × 150 mm (w/h/d), not incl. projecting parts and controls
Mass	Approx. 1.2 kg
Accessories supplied	Mounting hardware (1 set) Power connecting cord (1)

Design and specifications subject to change without notice.

使用時は添付資料も参照のこと
Refer to the additional documents.

FM/AM CASSETTE CAR STEREO

SONY®

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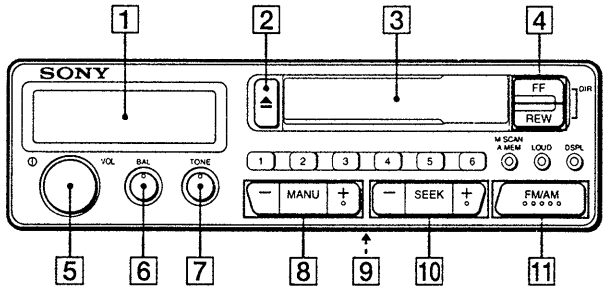
Flexible Circuit Board Repairing

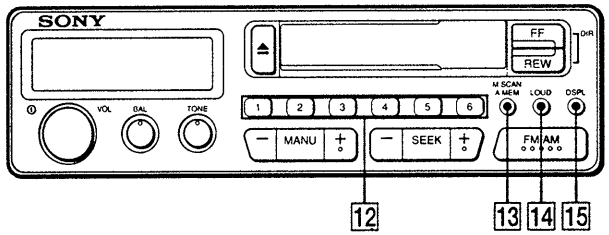
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Location and Function of Controls





1 **Display window**

2 **EJECT button**
Press to stop tape playback and to eject the cassette.

3 **Cassette insertion door**

4 **FF/REW (fast-winding)/DIR (tape transport direction change) buttons**
During playback, press REW or FF for fast winding, or press both REW and FF simultaneously to listen to the other side of the cassette.

5 **POWER (power on/off) switch/VOL (volume) control**

POWER switch	Turn clockwise to turn on the unit and counterclockwise to turn off.
VOL control	Turn clockwise to increase volume and counterclockwise to decrease.

6 **BAL (balance) control**
Turn to adjust the balance of the left and right speakers. It can be locked in the neutral position.

7 **TONE control**
Turn clockwise to increase the treble and turn counterclockwise to increase the bass.

8 **MANU (manual tuning) button**

9 **Frequency select switch (located on the bottom of the unit)**
See "Frequency Select Switch" in the Installation/Connections manual.

10 **SEEK (automatic tuning) button**

11 **FM/AM (band select) button**
Each time the button is pressed, the band changes in order of:

→ FMI → FMII → FMIII → AM →

12 **Preset number buttons** (XR-1600 only)

13 **M.SCAN (Memory Scan)/A.MEM (Automatic Memory) button** (XR-1600 only)

14 **LOUD (loudness) button** (XR-1600)
Press to reinforce bass and treble especially when listening at a low volume level. To cancel the mode, press it once more.

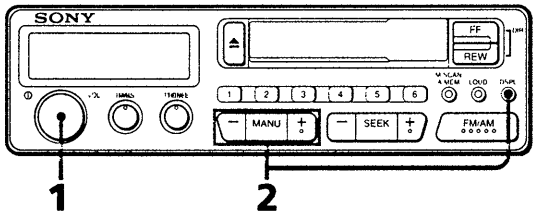
BOOST (bass boost) control (XR-1300)
Press to reinforce bass especially when listening at low volume.
To disengage the button, press it again.

15 **DSPL (display change/time set) button**
Each time the button is pressed, the display on the display window changes as follows:

During Tape playback	Clock
During Radio reception	Frequency → Clock

This section is extracted from instruction manual.

Setting the Clock



The clock has a 12-hour digital indication.

For example, to set it to 10:08.

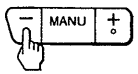
1 **Turn clockwise to turn the power on.**

2 **Press the DSPL button and hold it down.**
The indication starts to blink after two seconds.

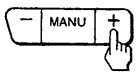
DSPL

With the DSPL button held down, proceed with the following:

Press the [−] button to set the hour digits.



Press the [+] button to set the minute digits.

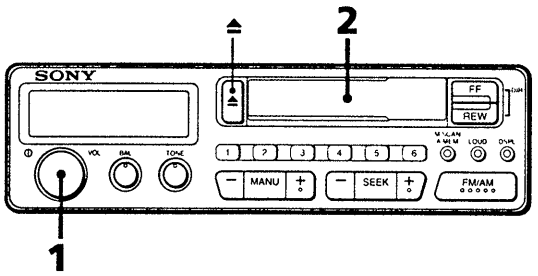


3 **The clock starts activating when you take your finger off the DSPL button.**

When setting the time digits

- Minute and hour digits do not go backward.
- "00" comes after "59". The hour digits do not change then.

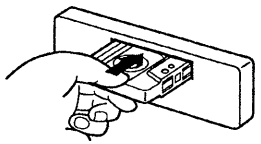
Listening to the Tape Playback



Before inserting a cassette, take up any slack in the tape with a thick pencil.

1 **Turn clockwise to turn the power on.**

2 **Insert a cassette.**
Playback starts automatically.



To listen to the reverse side of the cassette, press [FF] simultaneously.

To Eject the Cassette and Listen to the Radio

Press the ⏏ button.

To Wind the Tape Rapidly

Direction indicator	To advance	To rewind
◄ or ►	press [FF].	press [REW].

To resume playback, press [REW] or [FF] (that one which is not depressed) lightly.

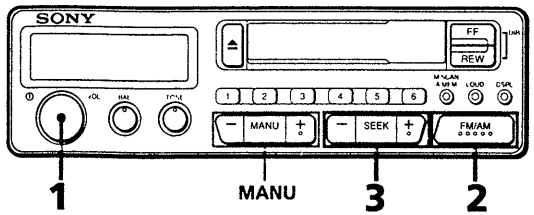
Note
Before turning off the unit; eject the tape to avoid tape damage.

Tape transport direction indication.

The side facing up is being played back.

The side facing down is being played back.

Tuning in a Station



Searching for the Stations Automatically — Automatic Tuning

1 Turn clockwise to turn the power on.

2 Press to select the desired band, FMI, FMII, FMIII or AM.

FM/AM

3 Press either side of the SEEK button.

SEEK SEEK

For lower frequencies For higher frequencies

The scanning stops when a station in received. Press either side of the button repeatedly until the desired station is received.

When an FM stereo program with a sufficient signal strength is tuned in

FMI STEREO 104.3

The "STEREO" indication appears.

To play back a cassette during radio reception

Insert a cassette. The radio will be turned off and playback will start automatically.

Tuning in by Adjusting the Frequency — Manual Tuning

Select the desired band, then press either side of the MANU button.

MANU MANU

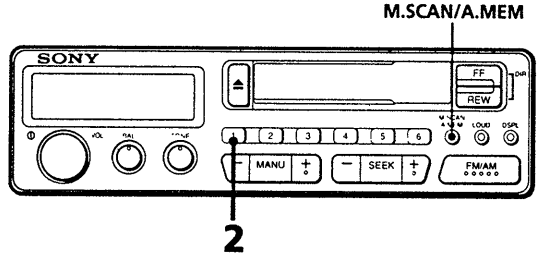
For lower frequencies For higher frequencies

Release the button when the desired station is received.

PREVENTING ACCIDENTS!

While you are driving, the use of Automatic Tuning and the Memory Preset Tuning is recommended instead of the Manual Tuning.

Using the Memory Preset Tuning (XR-1600 only)



Up to 6 stations on each band (FMI, FMII, FMIII and AM) can be stored on the preset number buttons in order of your choice.

Memorizing Only the Desired Stations

For example, store a station on the preset number button 1.

1 Tune in a desired station.
Using automatic or manual tuning (page 8).

2 Keep the preset number button pressed for about two seconds until the "MEM" indication comes on in the display window.

1

FMI STEREO 87.9 MEM 1

Repeat the same procedure to store other stations.

Only one station per band (FMI, FMII, FMIII and AM) can be stored in the memory on each preset number button.
If you try to store another station on the same preset number button, the previously stored station will be erased.

When the "MEM" indication comes on, the station is stored in the memory and the operation is completed. The "MEM" indication goes off after a while.

Receiving the Memorized Stations

Select the desired band. Press the desired preset number button lightly.

1 —— 6

Note
If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized again. To receive the previously memorized station, make sure that the preset number button is pressed only lightly.

Checking What is Being Broadcasted on the Preset Stations — Memory Scan Function

Select the desired band. Press the M.SCAN/A.MEM button lightly.

Each memorized station will be scanned for five seconds in order. (When the broadcast signal of the memorized station is too weak, it cannot be received.)

Note
If the M.SCAN/A.MEM button is kept pressed, the button will function as the A.MEM (automatic memory) button and the memories of the currently received station and the memories of the succeeding preset number buttons will be altered.

Memorizing the Stations Automatically — Automatic Memory Function

Select the desired band. Press the M.SCAN/A.MEM button until the "MEM" indication starts flashing.

FMI STEREO 87.9 MEM 1

The unit will start scanning the selected band and memorizes the tuned stations on the preset number buttons 1 through 6 automatically.

Installation

Precautions

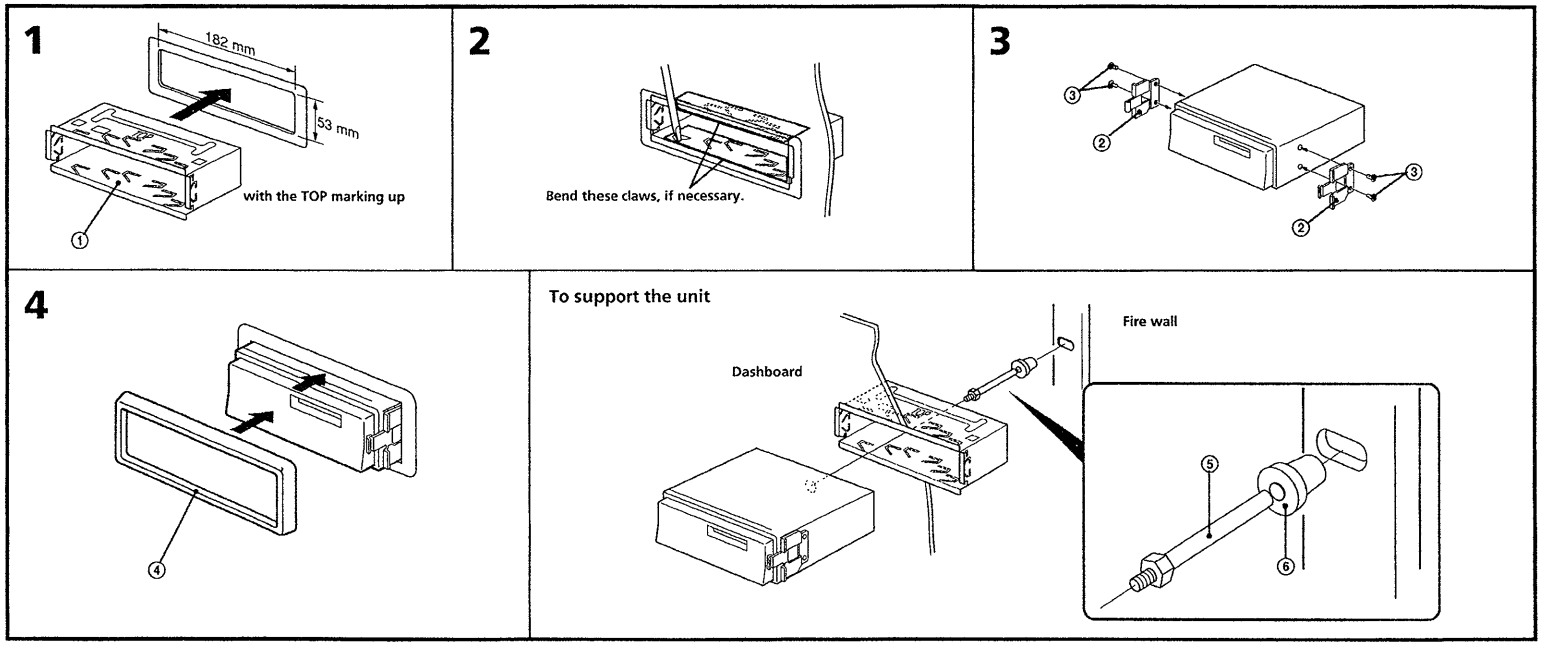
- Choose the installation location carefully so that the unit will not hamper the driver during driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

Mounting Example

Installation in the dashboard



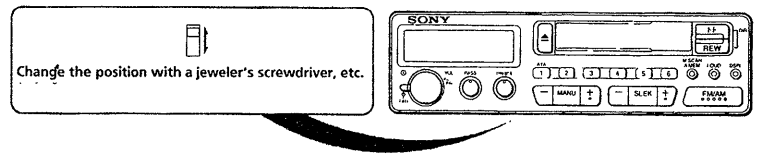
Connections

Caution

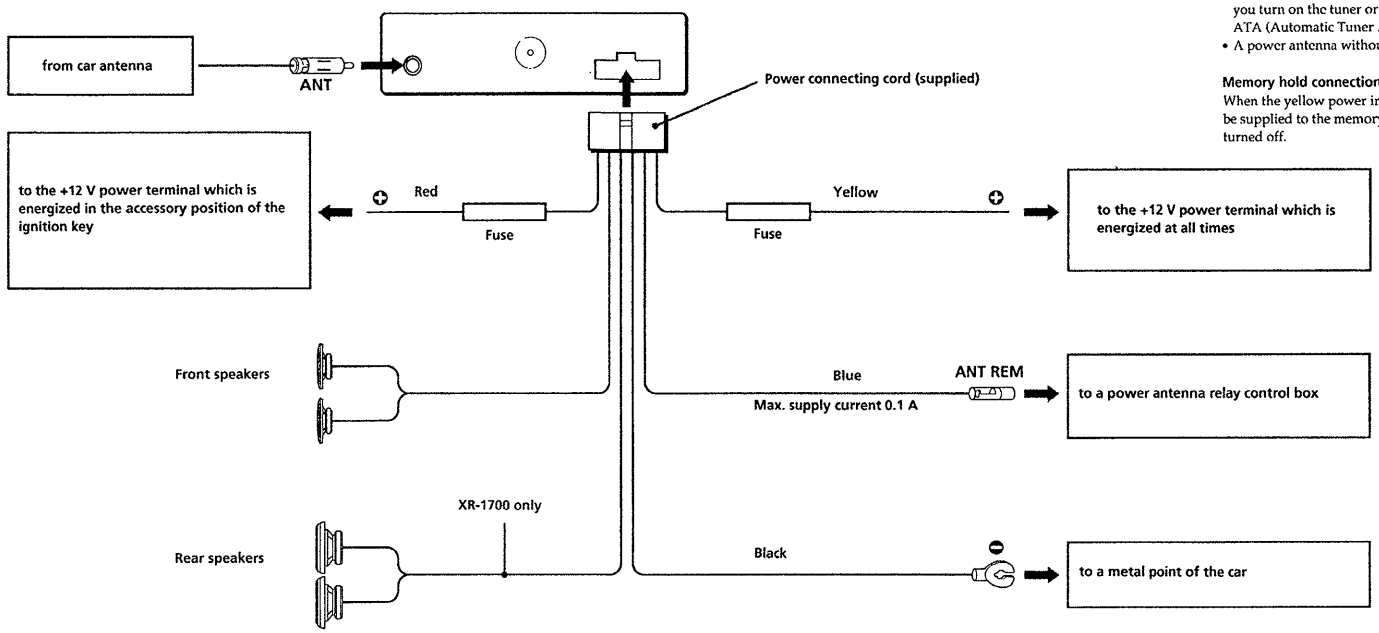
- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all ground wires to a common ground point.**

Frequency Select Switch

The AM (FM) tuning interval is factory-set to the 9K (50K)position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10K (200K) position before making connections.



Connection Example



Notes on the control leads

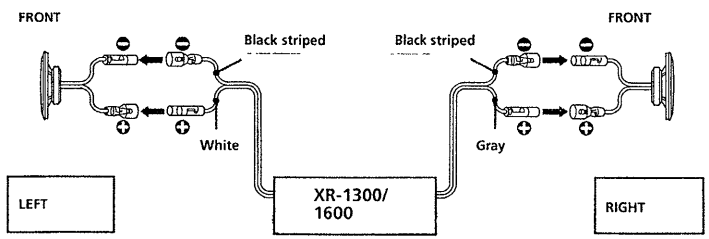
- The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or (XR-1700 only) when you activate the ATA (Automatic Tuner Activation) function.
- A power antenna without relay box cannot be used with this uni

Memory hold connection

When the yellow power input lead is connected, power will alway be supplied to the memory circuit even when the ignition key is turned off.

Speaker Connections

2-speaker connection



Notes on speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities.
  Otherwise, the speakers may be damaged.
- Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.
- Do not connect the speakers in parallel.
- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit.
  Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.

SECTION 2
EXPLANATION OF IC TERMINALS

IC701 μPD1723GF-628-3BE

Pin No.	Port No.	Pin name	I/O	Description
1	NC	–	–	This unit is connected to +5V.
2, 3	E01, E02	–	O	PLL error output terminal.
4	V_{DD1}	–	I	Device power supply terminal.
5	VCOL	AM OSC	I	Input terminal for AM section.
6	VCOH	FM OSC	I	Input terminal for FM section.
7	CE	–	I	Input terminal for device selection signal.
8	V_{DD2}	–	I	Device power supply terminal.
9	PD1	SCAN	O	Output high during SEEK when tuner is ON.
10	PD2	LOCAL	O	Output high when local is ON and low the tuner is OFF.
11	PD3	PTAPE	O	Output terminal for power supply of the tape mechanism deck.
12	PC0	SIG0	O	Not used.
13 14	PC1 PC2	SIG1 SIG2	O	Output for signal switching (source) SIG1 / SIG2 / : L / L / AUX H / L / TAPE L / H / AM H / H / FM
15	PC3	MUTE	O	Mute output.
16	PA0	AM IF	I	Input for IF count of AM.
17	PA1	FM IF	I	Input for IF count of FM.
18	PA2	$\overline{MONO}/\overline{ST}$	O/I	Forced monaural output and stereo input. Forced monaural ON (during FM reception) and outputs low at all times besides during FM reception. Becomes input mode during forced monaural OFF (during FM reception). (STEREO is displayed at low input)
19	PA3	LOUD	O	Output high if LOUD is ON when the power is turned ON. (besides all OFF.)
20	PB0	$\overline{AMS}$	O	Output low at AMS ON during tape ON. Output high at tuner and AUX ON. (not used)
21	PB1	METAL	O	Output high at METAL ON during tape ON. Output low at tuner and AUX ON. (not used)
22	PB2	DOLBY	O	Output low at DOLBY ON during tape ON. Output high at tuner and AUX ON. (not used)
23	PB3	POWER	O	Output high if AUX, tuner, tape is ON. Output low when all is OFF. (not used)
24	XO	–	O	Connection terminal for liquid crystal oscillation element. (4.5MHz)
25	XI	–	I	
26	GND	–	–	Ground terminal for device.
27	CGP	BEEP/COLOR	O	Not used.
28 – 39	LCD27 – LCD16	–	O	Output terminal for LCD panel segment signal.
40 – 55	LCD15/KS15 – LCD0/KS0	–	O	Output terminal for LCD panel segment signal and output terminal for key source signal.
56, 57	COM1, COM2	–	O	Output terminal for LCD panel common signal
58	GND	–	–	Ground terminal for device.
59 – 62	K3 – K0	–	I	Input termial for key return signal.
63	SD	–	I	Electric field input terminal. Used for SD detection.
64	$\overline{INT}$	BU CHECK	I	CE and BUCHECK OFF.

SECTION 3
ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENT

PRECAUTION

1. Wipe the following components with an absorbent cotton cloth moistened with alcohol before adjustment :
   PB head — Pinch roller
   Idler — Rubber belt
   Capstan
2. Demagnetize the PB head using a head demagnetizer.
3. Be careful not to use a magnetized screwdriver.
4. After adjustment is completed, lock the adjustment parts using screws.
5. Unless otherwise specified, make adjustments at the specified voltage (14.4V).

Torque Measurement

Measure the torque at a supply voltage of 14.4V DC.

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	35 – 65 g•cm (0.49 – 0.90 oz•inch)
FWD Back Tension		1.5 – 6 g•cm (0.02 – 0.08 oz•inch)
REV	CQ-102RC	35 – 65 g•cm (0.49 – 0.90 oz•inch)
REV Back Tension		1.5 – 6 g•cm (0.02 – 0.08 oz•inch)
FF, REW	CQ-210B	70 – 160g•cm (0.98 – 2.22 oz•inch)

3-2. ELECTRICAL ADJUSTMENTS

DECK SECTION

1. The adjustments should be performed in the order given in this service manual.
2. The adjustments should be performed for both L-CH and R-CH.

Test Tape

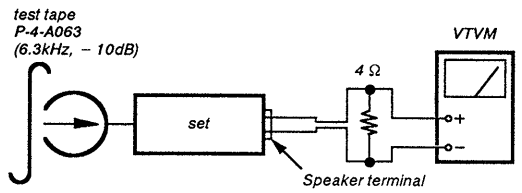
Type	Signal	Used for
P-4-A063	6.3kHz, – 10dB	Head azimuth Adjustment
WS-48A	3kHz, 0dB	Tape Speed Adjustment

0 dB=0.775V

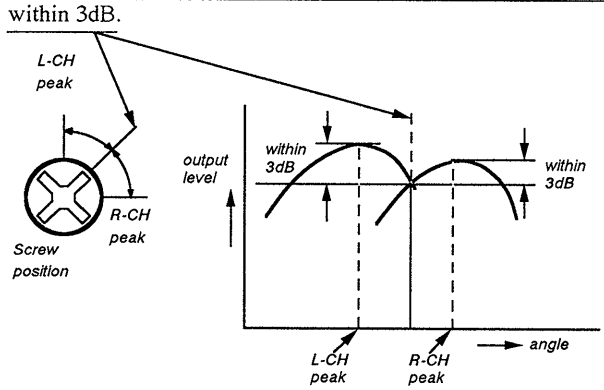
PB Head Azimuth Adjustment

Procedure :

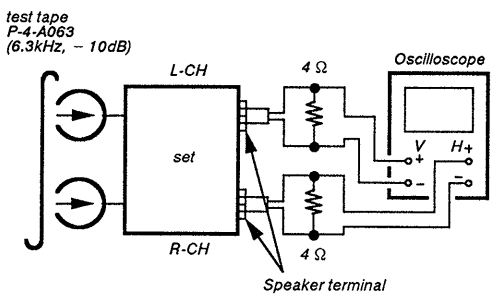
1. Put the set into the FWD PB mode.

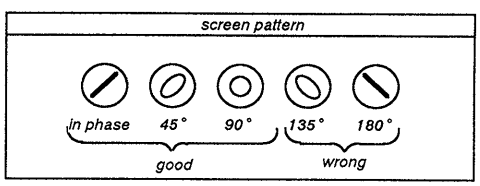


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 3dB.



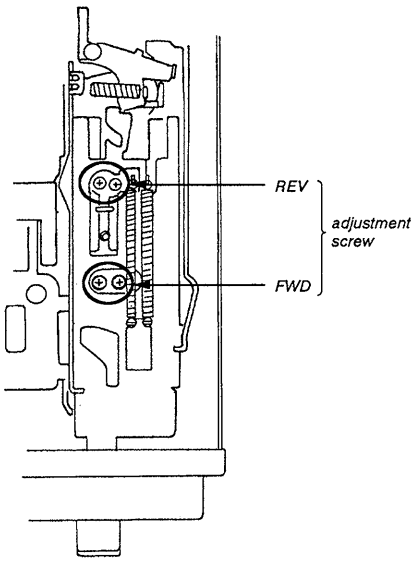
3. Check the phases in the PB mode





4. Repeat the above adjustment for the PB REV mode.
5. After the adjustment, lock the screw with locking compound.

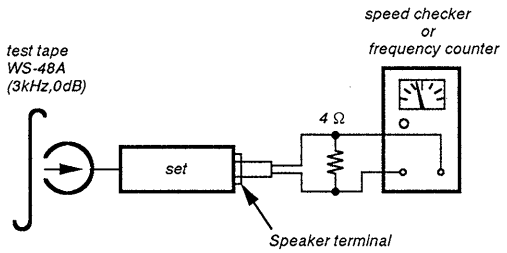
Adjustment Location :



Capstan Motor Tape Speed Adjustment

Procedure :

1. Put the set into the FWD PB mode.

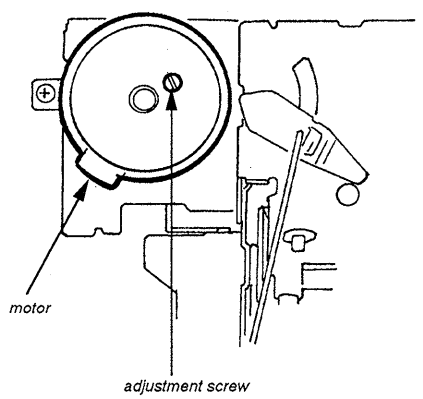


Specification : Constant speed

Speed checker	Frequency counter
± 0.65%	2,980 to 3,020 Hz

Adjust so that the frequency difference between the FWD and REV modes is within 1.5%.

Adjustment Location :



TUNER SECTION

Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

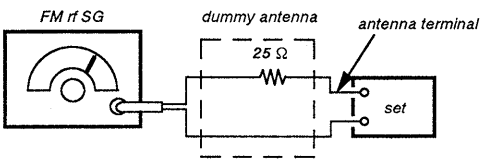
0dB=1 μV

FM Auto-Scan Stop Level Adjustment

Note : Be sure to perform this adjustment before "AM Auto-scan Stop Level Adjustment"

Setting :

FM/AM button : FM
200k/50k (SW1) : 200k (Hz)

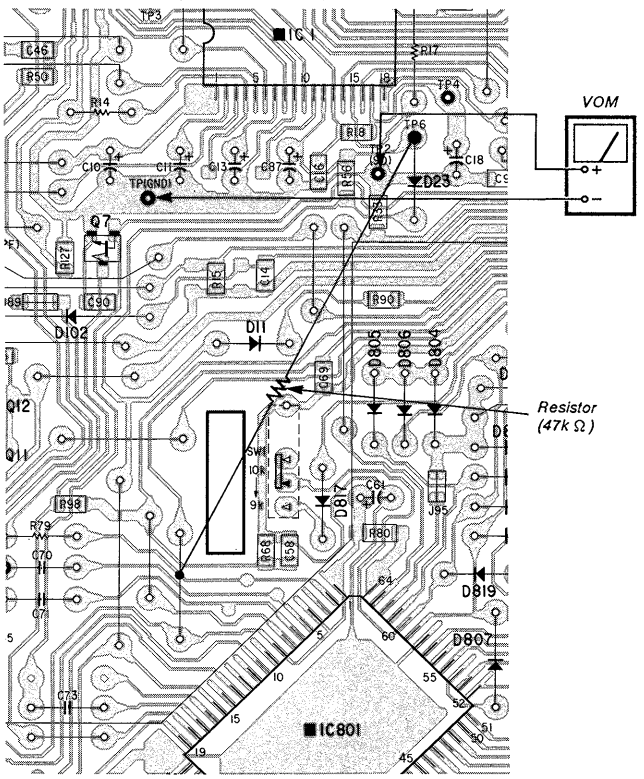


Carrier frequency : 98.1MHz
Output level : 23dB (14 μV)
Modulation : 1kHz, 75kHz deviation (100%)

Procedure :

1. Using a resistor (47k Ω), connect TP6 and +5V (IC801 ④ pin).
2. Tune the set to 98.1MHz.
3. Adjust SVR5 at the point where the VOM reading changes from low to high. (around 2 – 3V)
4. After adjustment is completed remove the resistor (47k Ω) .

【MAIN BOARD】 (conductor side)

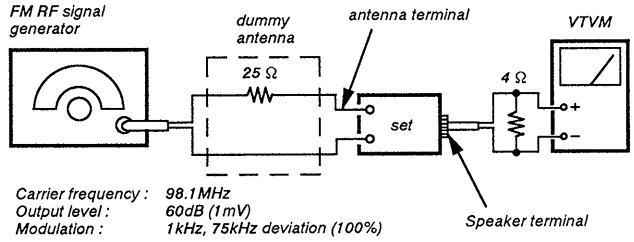


Adjustment Location : Main board

FM Discriminator Adjustment

Setting :

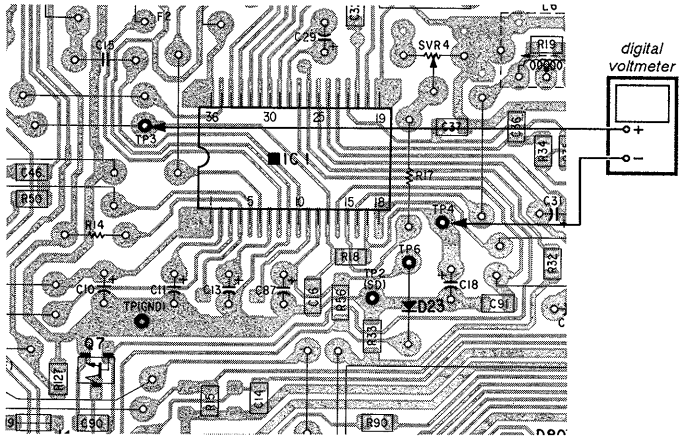
FM/AM button : FM
200k/50k (SW1) : 200k (Hz)



Procedure :

1. Tune the set to 98.1MHz.
2. Adjust T401, L6 for a maximum reading on VTVM.
3. Adjust L6 for a 0 ± 20mV reading on digital voltmeter.

【MAIN BOARD】 (conductor side)

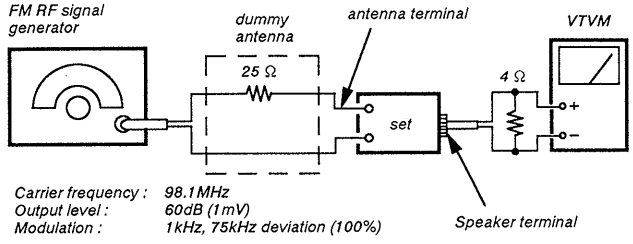


Adjustment Location : Main board (L6)
FE1 (T401)

Limiter Sens Adjustment

Setting :

FM/AM button : FM
200k/50k (SW1) : 200k (Hz)



Procedure :

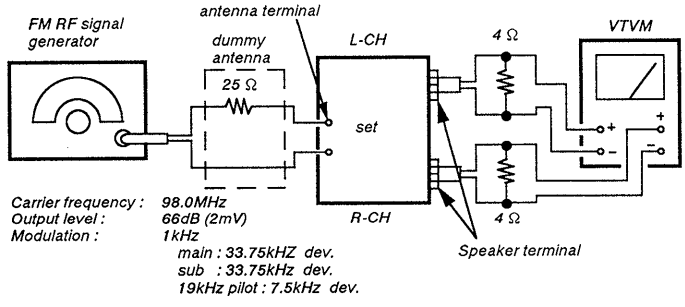
1. Tune the set to 98.1MHz.
2. Input a 60dB signal from FM RF SG, when read the output of the speaker terminal to AdB.
3. Change the output of FM RF SG so that output of the speaker terminal to A − 3dB.
4. Confirm that the output of FM RF SG becomes within 21dB.
5. Adjust the SVR4 and repeat the steps 3 − 4.

Adjustment Location : Main board

FM Stereo Separation Adjustment

Setting :

FM/AM button : FM
200k/50k (SW1) : 200k (Hz)



Procedure :

1. Fully turn SVR2 counterclockwise.

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust SVR3 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust SVR3 for minimum reading.

L-CH Stereo separation : Ⓐ − Ⓑ
R-CH Stereo separation : Ⓒ − Ⓓ
The separations of both channels should be equal.

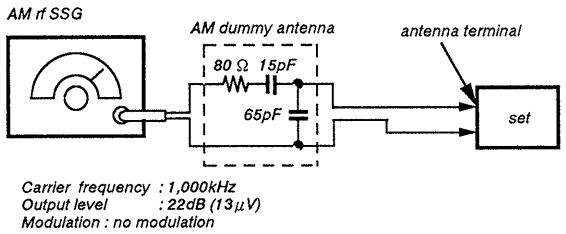
2. Adjust so that separation is maximized.
3. Set the output level of a signal generator to 32dB (39.8 μV/m) and adjust SVR2 so that separation is 10dB ± 5.0dB.

Adjustment Location : Main board

AM Auto-Scan Stop Level Adjustment

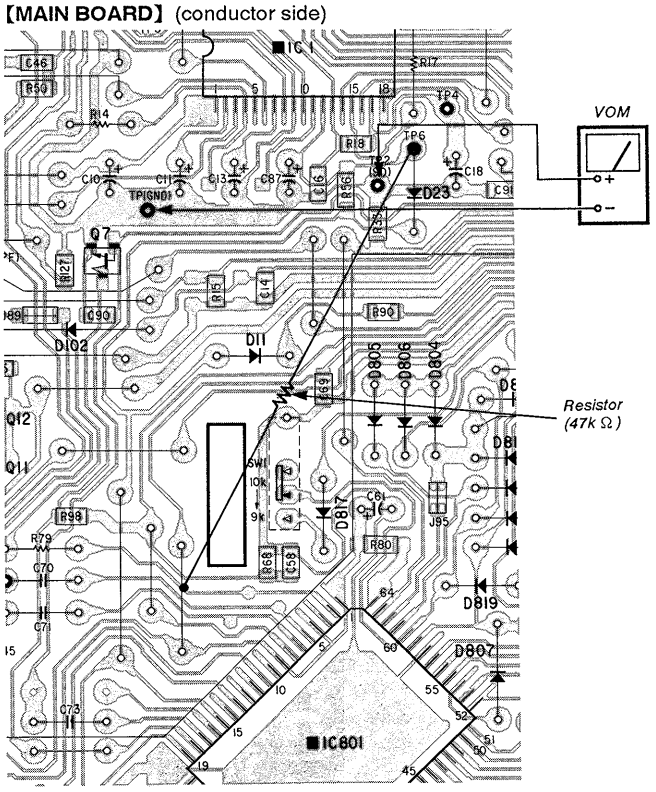
Note : Be sure to perform this adjustment before "FM Auto-scan Stop Level Adjustment"

Setting :
FM/AM button : AM
10k/9k (SW1) : 10k(Hz)



Procedure :
1. Using a resistor (47k Ω), connect TP6 and +5V (IC801 ④ pin).
2. Tune the set to 1,000kHz.
3. Adjust SVR1 at the point where the VOM reading changes from low to high. (around 2 – 3V)
4. After adjustment is completed remove the resistor (47k Ω)

【MAIN BOARD】 (conductor side)

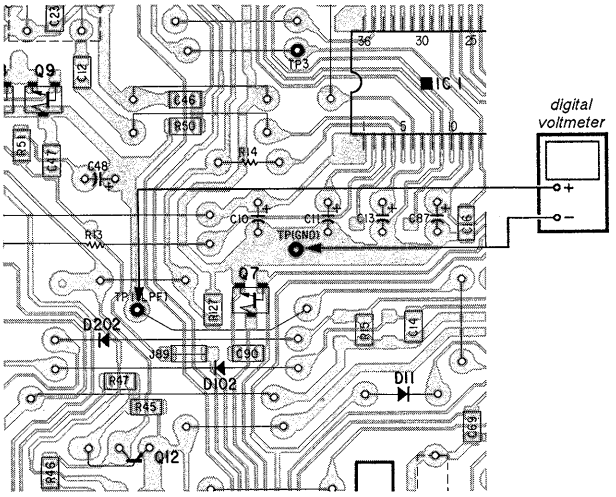


Adjustment Location : Main board

AM OSC Voltage Adjustment

Setting:
FM/AM button : AM
10k/9k (SW1) : 10k (Hz)

【MAIN BOARD】 (conductor side)



Procedure :
1. Tune the set to 530kHz.
2. Adjust L4 for 1.2V reading on digital voltmeter.

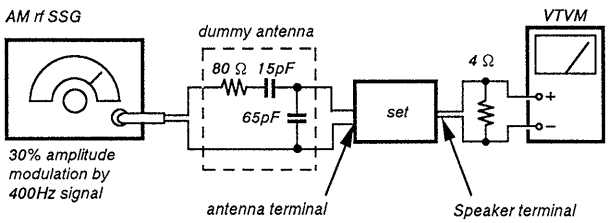
Adjustment Location : Main board

AM Tracking Adjustment

Setting :

FM/AM button : AM

10k/9k (SW1) : 10k (Hz)



Procedure :

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2, 3	600kHz
L5	1,000kHz

Adjustment Location : Main board

System Clock Adjustment

Setting :

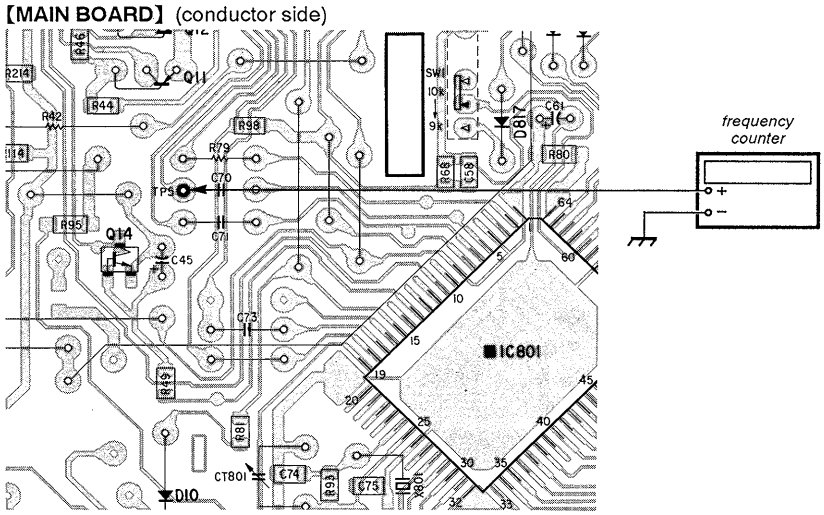
FM/AM button : AM

10k/9k (SW1) : 10k (Hz)

Procedure :

1. Tune the set to 530kHz.
2. Adjust CT801 for 980.000 ± 0.020kHz reading on frequency counter.

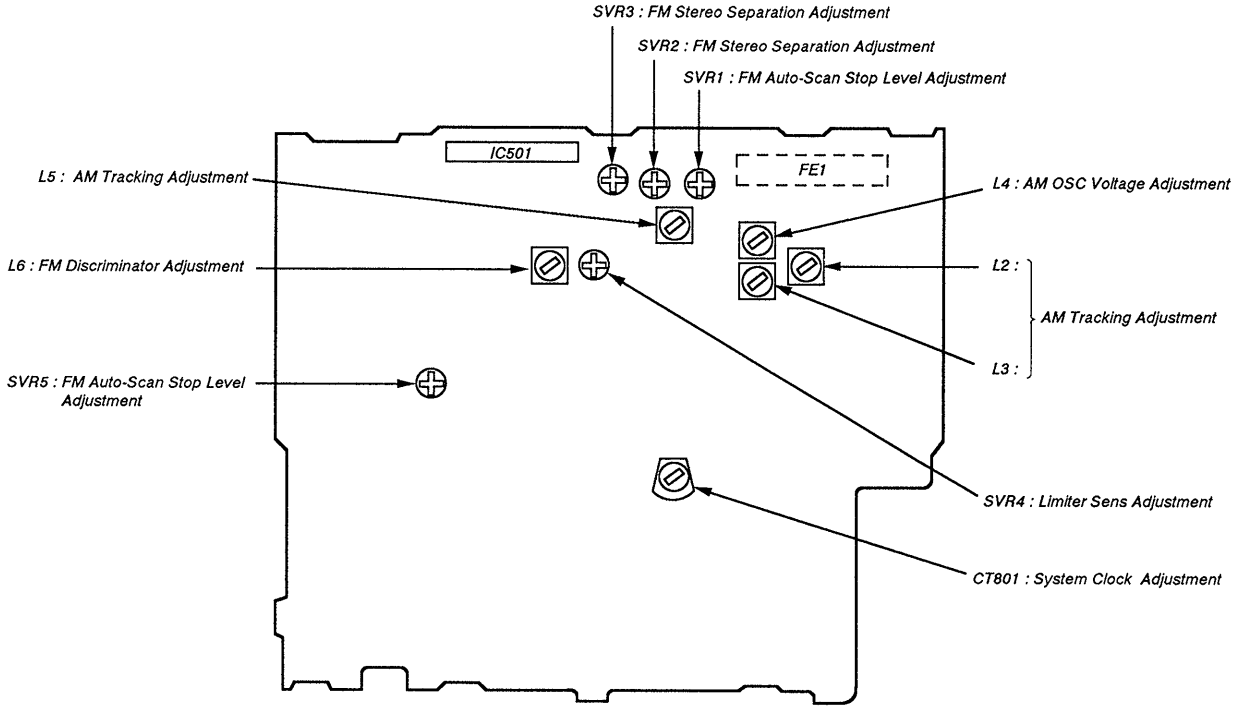
【MAIN BOARD】 (conductor side)

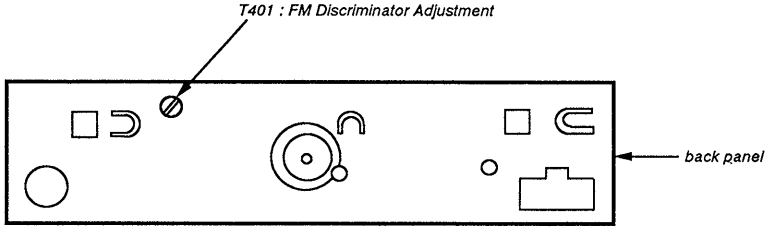


Adjustment Location : Main board

Adjustment Location :

【MAIN BOARD】 (Component side)


SVR3 : FM Stereo Separation Adjustment
SVR2 : FM Stereo Separation Adjustment
SVR1 : FM Auto-Scan Stop Level Adjustment
IC501
FE1
L5 : AM Tracking Adjustment
L4 : AM OSC Voltage Adjustment
L6 : FM Discriminator Adjustment
L2 :
AM Tracking Adjustment
L3 :
SVR5 : FM Auto-Scan Stop Level Adjustment
SVR4 : Limiter Sens Adjustment
CT801 : System Clock Adjustment



SECTION 4
DIAGRAMS

● SEMICONDUCTOR LEAD LAYOUTS

DTA144YK
DTC144YK
2SA1162-G
2SC2712-YG
2SC2814-F4
2SC3396

2SA733-K

2SD1858-R-TV2

MTZJ-2.7A
MTZJ-9.1B
RM5.6ESB2
RM9.1ES-B3
1SS133

1SS226

10E2

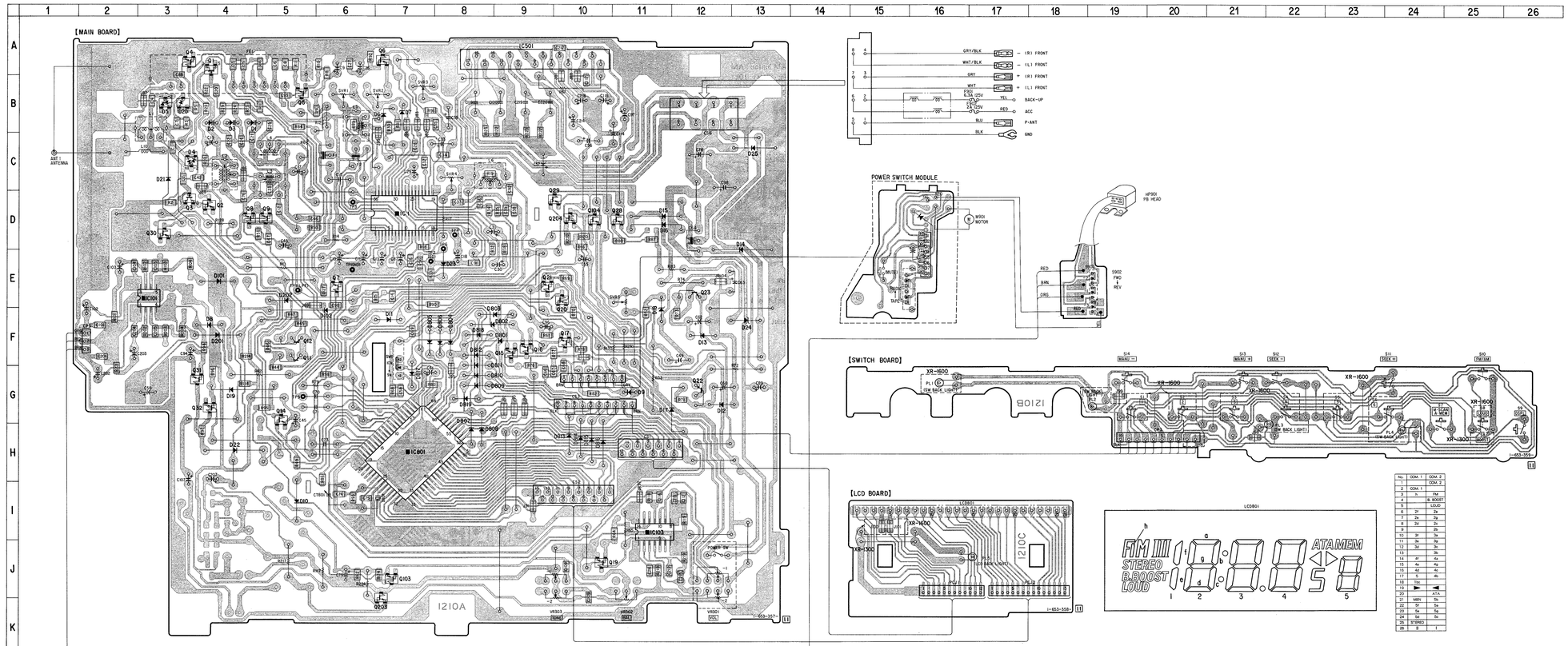
● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D1	B-4	D816	H-10
D2	B-4	D817	G-7
D3	B-4	D818	F-8
D4	C-3	D819	G-8
D5	B-3		
D6	B-7	IC1	D-7
D7	B-7	IC101	E-3
D8	F-4	IC103	I-11
D9	G-11	IC501	A-9
D10	I-5	IC801	H-7
D11	F-7		
D12	G-12	Q1	A-4
D13	F-12	Q2	D-4
D14	D-13	Q3	D-3
D15	D-11	Q4	A-3
		Q5	B-5
D16	D-11		
D17	G-11	Q6	A-7
D18	F-11	Q7	E-6
D19	G-4	Q8	D-4
D20	B-3	Q9	D-5
		Q11	F-5
D21	C-3		
D22	H-4	Q12	F-5
D23	E-7	Q14	G-5
D24	F-12	Q15	F-9
D25	C-13	Q16	F-9
		Q17	F-10
D101	E-4		
D102	F-6	Q19	J-10
D201	F-4	Q20	E-10
D202	E-5	Q21	E-9
D451	D-16	Q22	G-12
		Q23	E-12
D801	F-9		
D802	F-8	Q28	D-11
D803	F-8	Q29	D-10
D804	F-8	Q30	D-3
D805	F-7	Q31	G-3
		Q32	G-4
D806	F-8		
D807	H-8	Q103	J-7
D808	H-8	Q104	D-10
D809	G-8	Q203	J-7
D810	G-8	Q204	D-10
D811	F-8		
D812	F-8		
D813	H-10		
D814	H-10		
D815	H-10		

Note:

- ○— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ▨ : Pattern on the side which is seen.

4-1. PRINTED WIRING BOARDS



No.	COM. 1	COM. 2
1		COM. 2
2	COM. 1	
3	h	FM
4	a	B. BOOST
5	b	LOUD
6	2f	2a
7	2e	2g
8	2d	2c
9	2b	2h
10	3f	3a
11	3e	3g
12	3d	3c
13	3b	3h
14	4f	4a
15	4e	4g
16	4d	4c
17	5	4h
18	5hc	
19	▶	◀
20		ATA
21	MEM	5b
22	5f	5a
23	5e	5g
24	5d	5c
25	STEREO	
26	5	1

【MAIN BOARD】

【SWITCH BOARD】

【LCD BOARD】

POWER SWITCH MODULE

IC1 LA1875M FM/AM IF,DET,MPX

IC101 PB EQ AMP

IC103 MC14066BF LOUDNESS SWITCH

IC501 TA8210AH POWER AMP

IC801 μPD1723GF-628 SYSTEM CONTROL

● WAVEFORMS

① 5Vp-p 220 nsec

② 5Vp-p 20msec

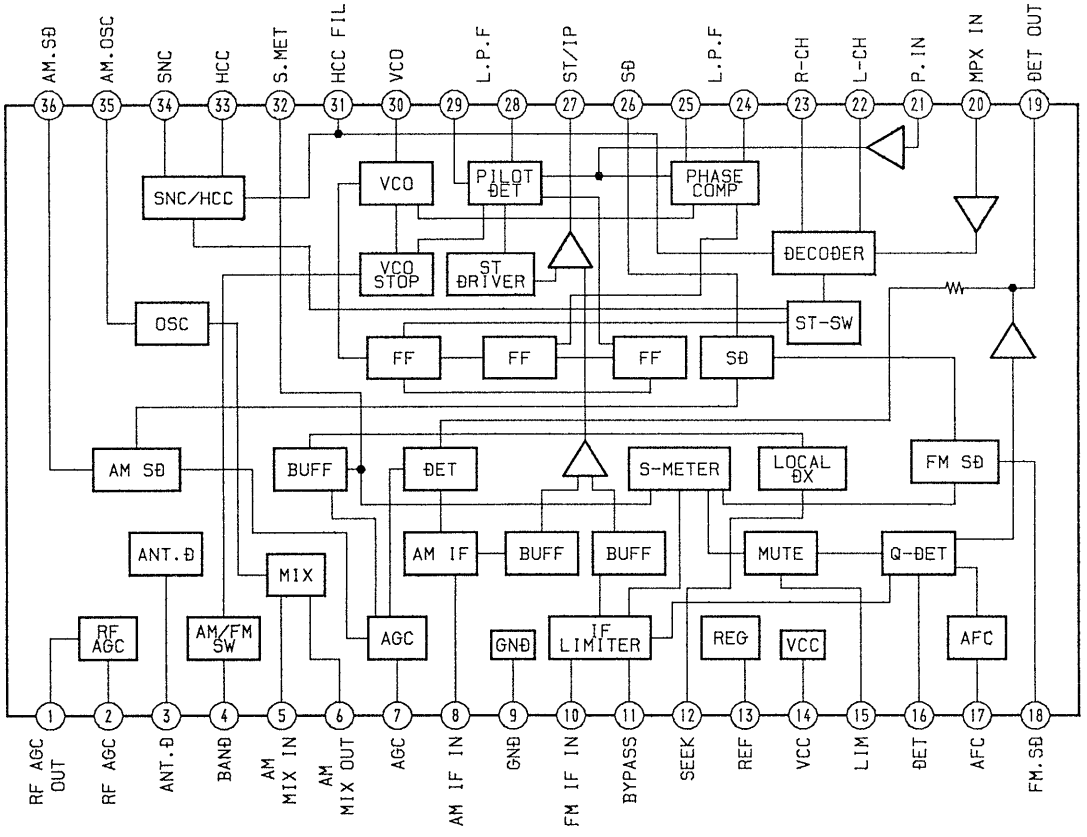
③ 5Vp-p 20msec

Note :

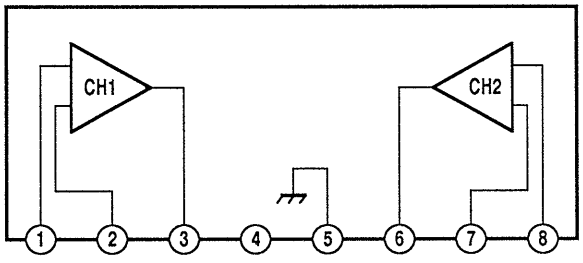
- All capacitors are in μ F unless otherwise noted. pF: μ μ F
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- B+ : B+ Line
- ▭ : adjustment for repair.
- Power voltage is dc14.4V and fed with regulated dc power supply from BACK-UP and ACC terminals.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
  ( ) : PLAY
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM ⇨ : PB

● IC BLOCK DIAGRAMS

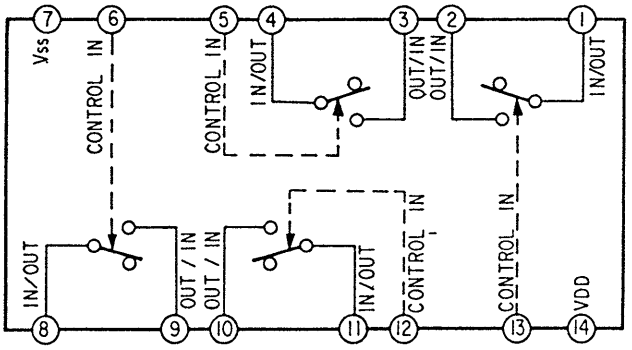
IC1 LA1875M



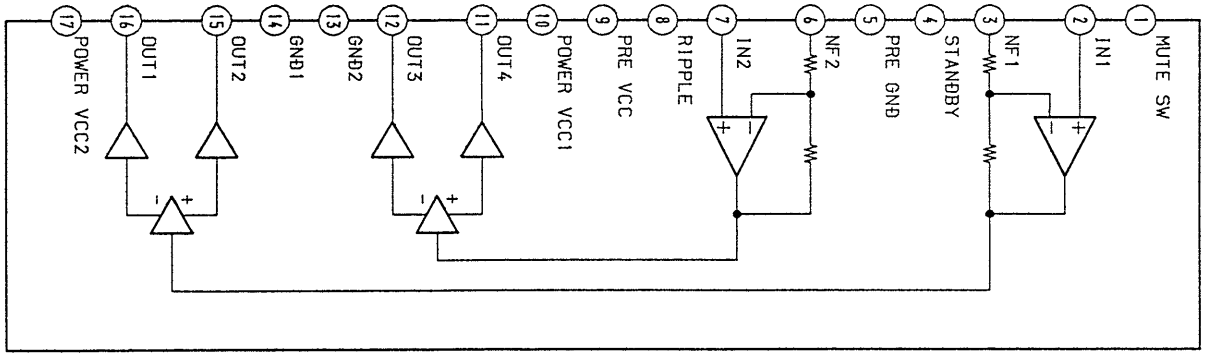
IC101 BA328F



IC103 MC14066BF



IC501 TA8221AH

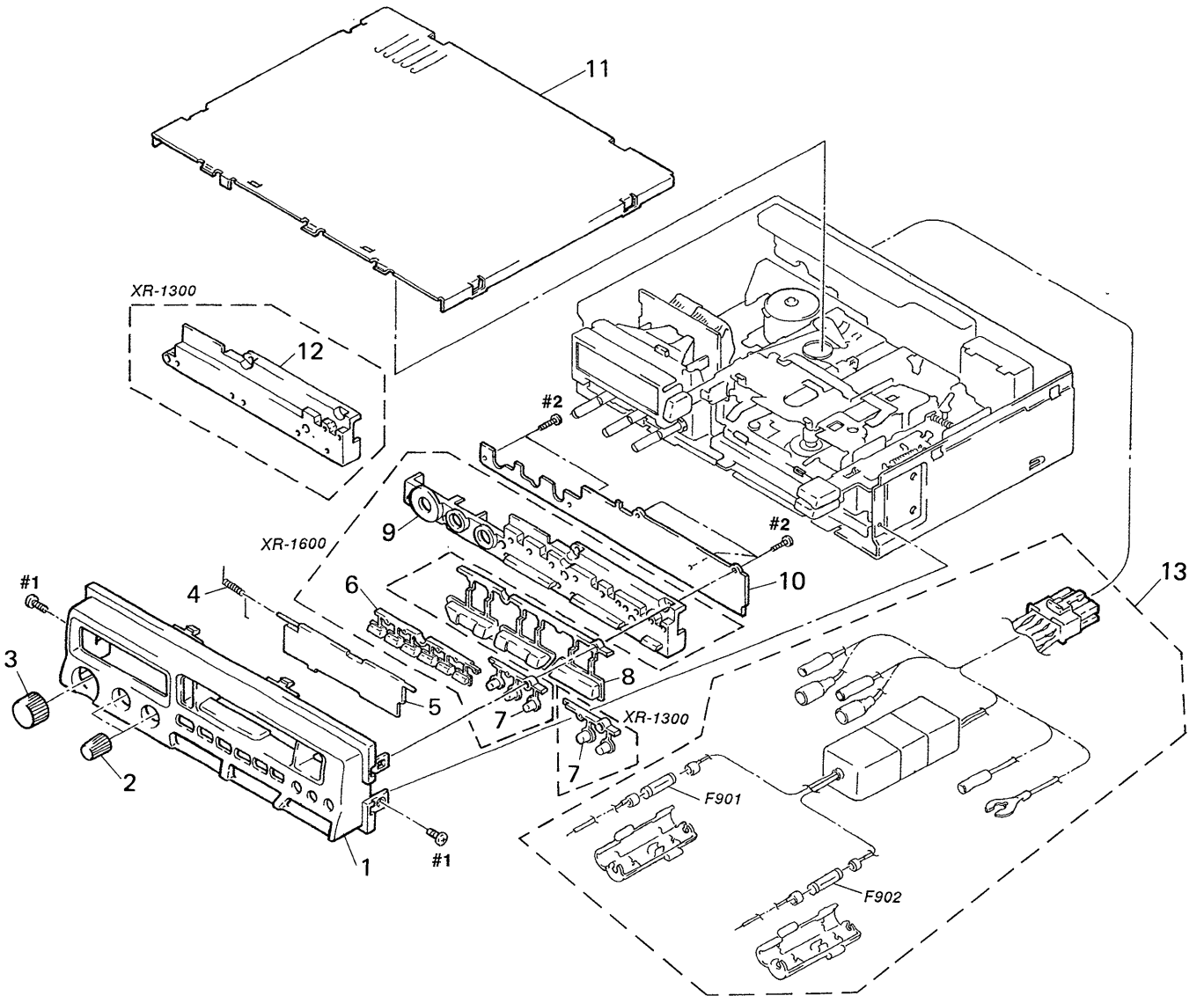


SECTION 5
EXPLODED VIEWS

NOTE :

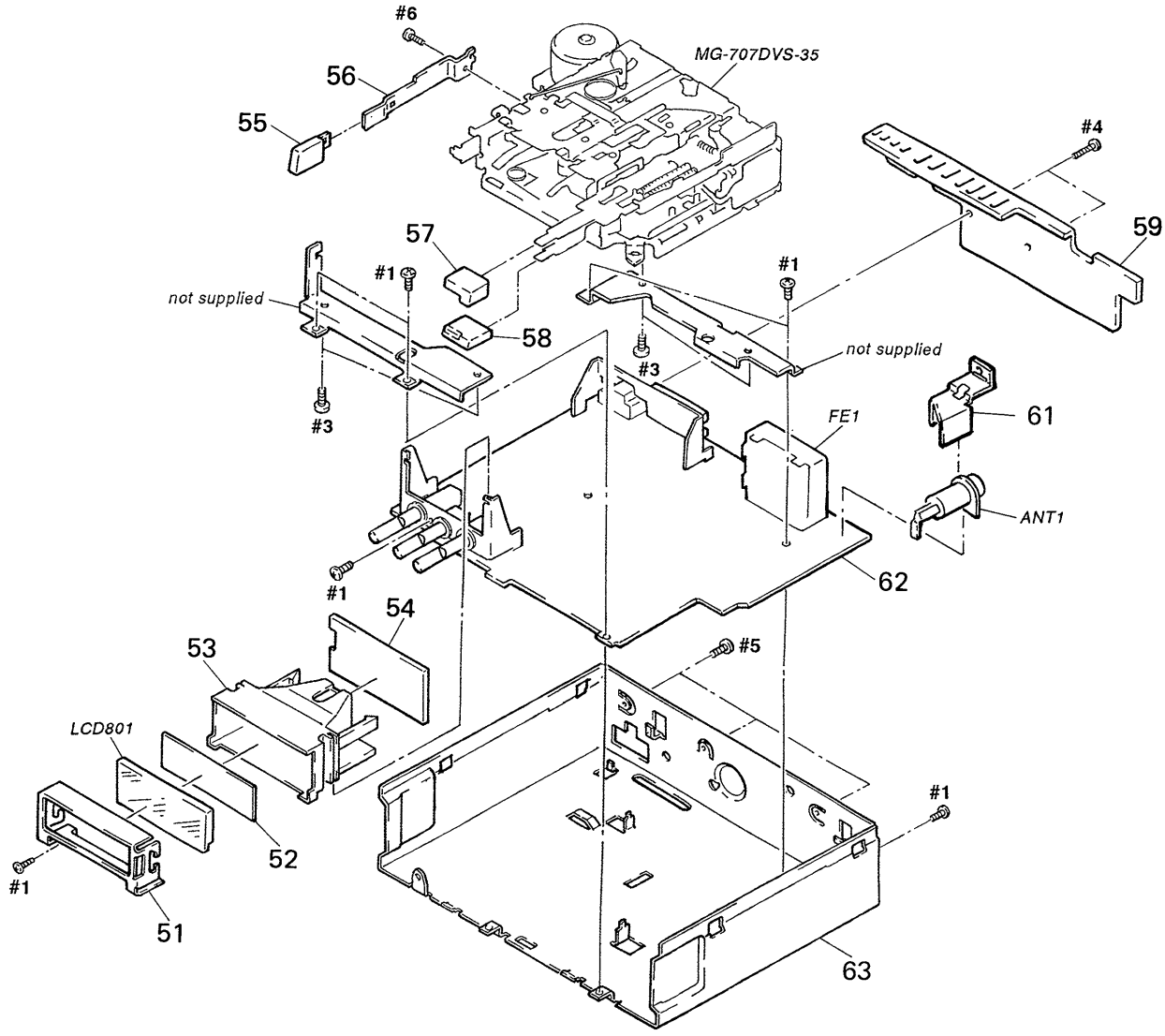
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

5-1. CHASSIS ASSEMBLY-1



Ref. No.	Part No.	Description	Remark
1	3-912-985-11	PANEL, FRONT(XR-1600)	
1	3-912-986-01	PANEL, FRONT(XR-1300)	
2	3-913-020-01	KNOB (BASS)	
3	3-913-038-01	KNOB (VOL 2)	
4	3-917-704-01	SPRING, TORSION	
5	3-912-987-11	DOOR, CASSETTE(XR-1600)	
5	3-912-987-21	DOOR, CASSETTE(XR-1300)	
6	3-912-992-01	BUTTON (PRESET)(XR-1600)	
7	3-913-017-01	BUTTON (3 GANG)(XR-1600)	
7	3-917-705-01	BUTTON (2 GANG)(XR-1300)	
8	3-912-991-01	BUTTON (TUNING)	
9	3-913-022-01	PLATE, LIGHT GUIDE(XR-1600)	
* 10	1-653-359-11	SWITCH BOARD	
* 11	3-913-032-01	COVER	
12	3-913-039-01	HOLDER(XR-1300)	
13	1-765-568-11	CORD (WITH CONNECTOR) (including F901, 902)	
F901	1-532-422-11	FUSE 6.3A/125V	
F902	1-532-417-11	FUSE 2.0A/125V	

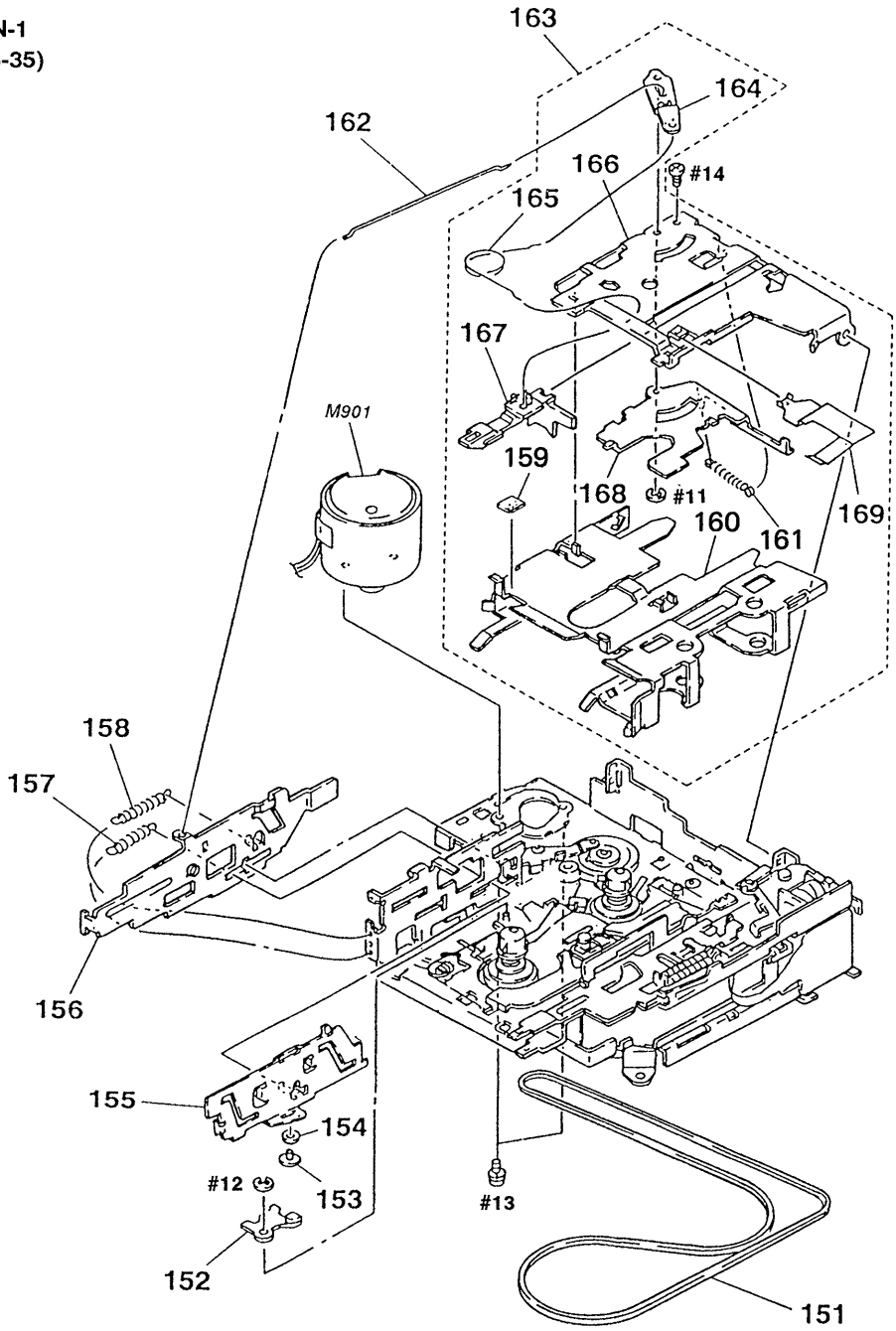
5-2. CHASSIS ASSEMBLY-2



Ref. No.	Part No.	Description	Remark
* 51	3-913-023-01	BRACKET (LCD)	
* 52	3-913-031-01	SHEET (LCD)	
* 53	3-913-021-01	HOLDER (LCD)	
* 54	1-653-358-11	LCD BOARD	
55	3-912-993-01	BUTTON (EJECT)	
* 56	3-913-030-01	LEVER (EJECT)	
57	3-912-994-01	BUTTON (FF)	
58	3-912-995-01	BUTTON (REW)	

Ref. No.	Part No.	Description	Remark
* 59	3-913-029-01	HEAT SINK	
* 61	3-913-024-01	BRACKET (ANT)	
* 62	A-3222-792-A	MAIN BOARD, COMPLETE	
* 63	3-917-815-01	CHASSIS	
ANT1	1-251-206-11	SOCKET(ANT)	
FE1	A-3298-201-A	FM TUNER UNIT	
LCD801	1-810-582-11	DISPLAY PANEL, LIQUID CRYSTAL	

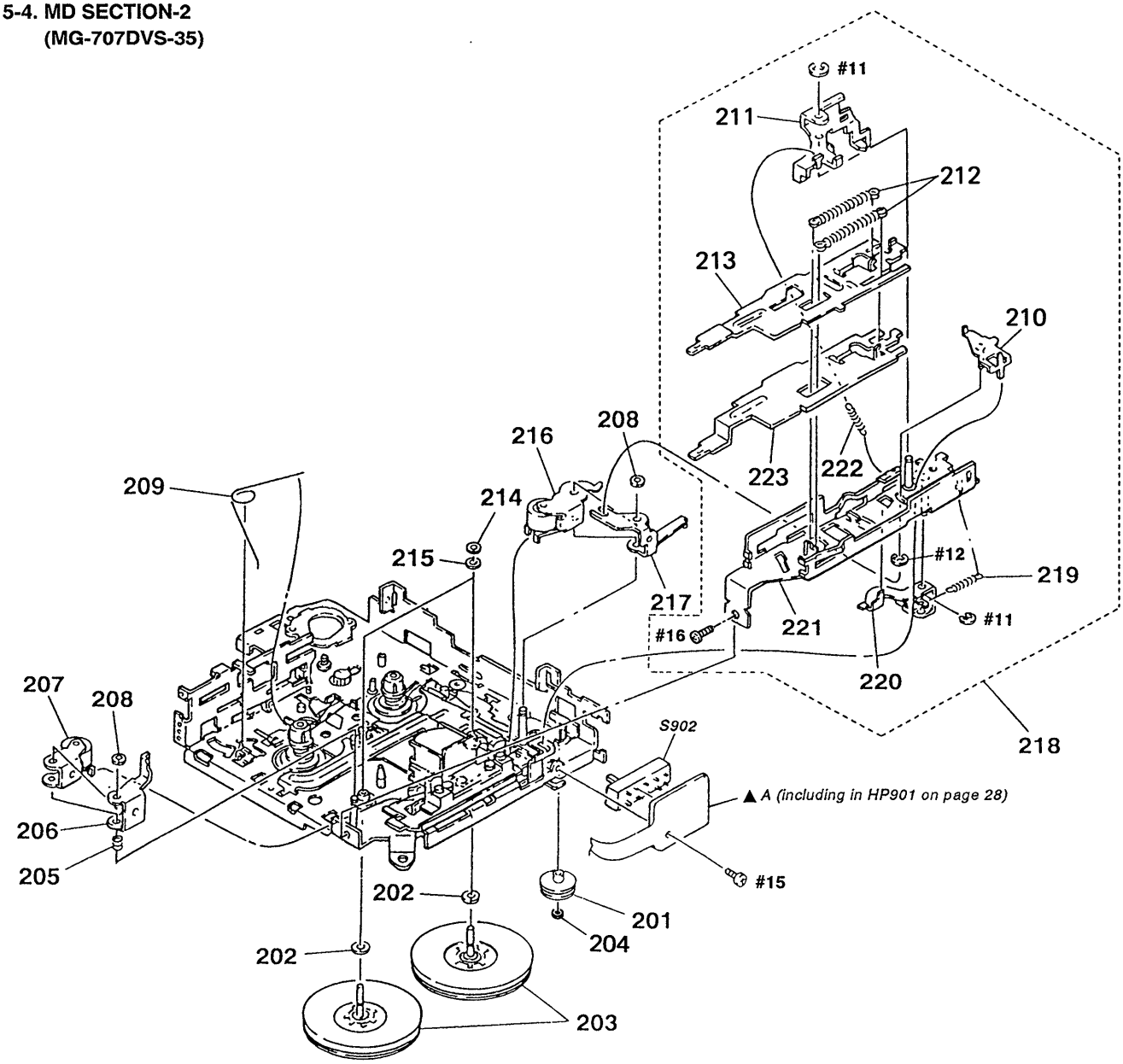
5-3. MD SECTION-1
(MG-707DVS-35)



Ref. No.	Part No.	Description	Remark
151	3-367-284-01	BELT, MAIN	
152	3-367-313-01	ARM, H.P PUSH	
153	3-367-264-01	ROLLER (A), H.P	
154	3-367-265-01	ROLLER (B), H.P	
* 155	3-367-311-01	PLATE (M), PUSH, C.H	
* 156	3-367-269-01	LEVER (M), PUSH	
157	3-367-267-01	SPRING, C.H	
158	3-367-268-01	SPRING, PUSH LEVER	
159	3-367-254-01	RUBBER, CUSHION	
* 160	3-367-256-01	CASE (M), CASSETTE	

Ref. No.	Part No.	Description	Remark
161	3-367-253-01	SPRING, C.D	
162	3-367-260-01	SPRING, P.E	
163	X-3362-789-2	CASSETE CASE ASSY	
* 164	3-367-252-01	RIVETING ASSY, P.E PLATE	
165	3-367-255-01	SPRING (C), REVERSE	
* 166	3-367-251-01	LIFTER, CASE	
167	3-367-258-01	SLIDER (C), PACK	
* 168	3-367-257-01	PLATE (B), C.D	
* 169	3-367-259-01	SPRING, PACK RETAINER	
M901	3-916-079-01	MOTOR ASSY	

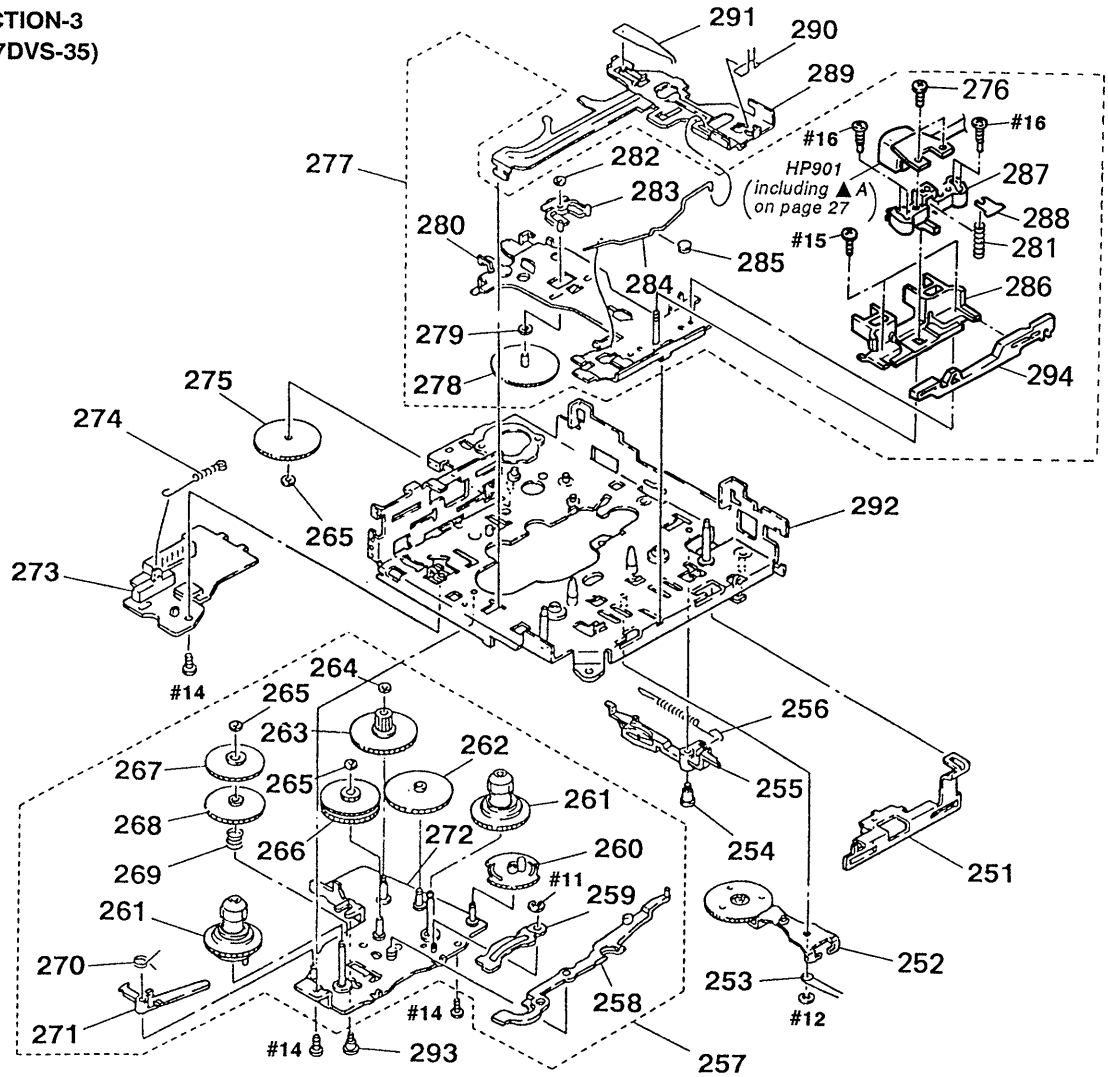
5-4. MD SECTION-2
(MG-707DVS-35)



Ref. No.	Part No.	Description	Remark
201	3-367-287-01	PULLEY, MIDWAY	
202	3-303-961-01	WASHER, POLY	
203	3-367-283-01	RIVETING ASSY, F.L CAPSTAN	
204	3-321-393-11	WASHER, STOPPER	
205	3-367-285-01	SPRING, P.P	
* 206	3-367-296-01	ARM, H.P RETURN	
207	3-367-232-01	ARM (R) ASSY, PINCH ROLLER	
208	3-676-387-00	POLY-SLIDER (DIA.1.6)	
209	3-367-314-01	SPRING (M), HEAD PANEL	
* 210	3-367-234-01	RIVETING ASSY, SEESAW PLATE(M)	
* 211	3-367-303-01	LOCK PLATE (M)	
212	3-916-080-01	SPRING, F.R LEVER	

Ref. No.	Part No.	Description	Remark
* 213	3-367-299-01	LEVER (M.V), FF	
214	3-592-680-00	WASHER (C), POLYETHYLENE	
215	3-315-495-41	WASHER	
216	3-367-231-01	ARM (F) ASSY, PINCH ROLLER	
* 217	3-367-292-01	PLATE, FUNCTION, SEESAW	
218	X-3362-792-1	FR LEVER ASSY	
219	3-367-302-01	SPRING, P.C	
* 220	3-367-301-01	PLATE, P.C	
* 221	3-367-233-01	RIVETING ASSY, F.R BRACKET (M)	
222	3-367-304-01	SPRING (M), LOCK PLATE	
* 223	3-367-300-01	LEVER (M.V), REW	
S902	1-572-712-11	SWITCH, SLIDE (FWD/REV)	

5-5. MD SECTION-3
(MG-707DVS-35)



Ref. No.	Part No.	Description	Remark
* 251	3-367-294-01	PLATE (M), F.R SLIDE	
252	X-3362-791-2	F•R WORKING PLATE ASSY	
253	3-367-282-01	SPRING (M), F.R	
254	3-367-290-01	SCREW (T), COLOR	
255	3-367-289-01	ARM (C), TRIGGER	
256	3-367-297-01	SPRING (C), T.A	
257	X-3365-723-1	M•G PLATE ASSY	
258	3-367-241-01	PLATE (B), E.D	
* 259	3-367-245-01	PLATE, LIFTUP	
260	3-367-240-01	GEAR (M), REVERSE	
261	3-383-370-01	REEL ASSY, T	
262	3-367-239-01	GEAR, E.D	
263	3-367-238-01	GEAR, P.D	
264	3-676-387-00	POLY-SLIDER (DIA.1.6)	
265	3-318-236-01	WASHER, POLY, SLIT	
266	3-367-244-01	CLUTCH ASSY, P	
267	3-367-236-01	GEAR (R), P	
268	3-367-237-01	GEAR (R), F	
269	3-367-243-01	SPRING, T.N	
270	3-367-247-01	SPRING	
271	3-367-246-01	ARM, REVERSE PREVENTION	
* 272	3-367-242-01	RIVETING ASSY, M.G PLATE	
273	3-916-081-01	SWITCH MODULE, POWER	

Ref. No.	Part No.	Description	Remark
274	3-367-293-01	SPRING, POWER SWITCH	
275	3-370-853-01	GEAR (V), MAIN	
276	3-916-082-01	SCREW, FIX	
277	X-3368-749-1	HEAD PANEL ASSY	
278	3-367-227-01	GEAR, P	
279	3-701-447-11	WASHER, 10	
* 280	3-383-367-01	RIVETING ASSY, HEAD PANEL	
281	3-383-368-01	SPRING, H.G	
282	3-579-788-01	WASHER, STOPPER	
283	3-367-226-01	METAL, P. GEAR	
284	3-367-225-01	SPRING, P.R	
285	3-367-224-01	ROLLER, SP	
* 286	3-383-373-01	GUIDE (U), TAPE	
* 287	3-383-374-01	HOLDER (B), HEAD	
288	3-383-369-01	WASHER, FASTEN	
* 289	3-367-272-01	PLATE, MAIN	
290	3-367-274-01	SPRING, H.S	
291	3-367-273-01	SPRING, M.S	
* 292	3-375-374-01	RIVETING ASSY, CHASSIS	
293	3-367-295-01	SCREW (P), COLOR	
* 294	3-383-376-01	PLATE (B), SHIFT	
HP901	1-543-976-11	HEAD, MAGNETIC (PLAYBACK)	

SECTION 6
ELECTRICAL PARTS LIST

LCD **MAIN**

NOTE :

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal oxide-film resistor
  F : nonflammable
- Items marked " * "are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ , for example :
  uA.... : μA.... , uPA.... : μPA....
  uPB.... : μPB.... , uPC.... : μPC....
  uPD.... : μPD....
- CAPACITORS
  uF : μF
- COILS
  uH : μH

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description			Remark
*	1-653-358-11	LCD BOARD			
		*********			
		< JUMPER RESISTOR >			
J100	1-216-295-00	METAL CHIP	0	5%	1/10W(XR-1300)
J101	1-216-295-00	METAL CHIP	0	5%	1/10W(XR-1600)
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-810-582-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< PILOT LAMP >			
PL5	1-517-334-11	LAMP, PILOT(LCD BACK LIGHT)			
**********					
*	A-3222-792-A	MAIN BOARD, COMPLETE			
		**********			
*	3-913-024-01	BRACKET (ANT)			
		< SOCKET >			
ANT1	1-251-206-11	SOCKET (ANT)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C3	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C4	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C5	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C6	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C7	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C8	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C9	1-124-584-00	ELECT	100uF	20%	10V
C10	1-124-584-00	ELECT	100uF	20%	10V
C11	1-126-303-11	ELECT	3.3uF	20%	35V
C12	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C13	1-126-163-11	ELECT	4.7uF	20%	50V
C14	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C15	1-161-473-00	CERAMIC	0.01uF	10%	50V
C16	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C17	1-126-233-11	ELECT	22uF	20%	16V
C18	1-124-252-00	ELECT	0.33uF	20%	50V
C19	1-126-947-11	ELECT	47uF	20%	10V
C20	1-163-234-11	CERAMIC CHIP	20PF	5%	50V
C21	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C22	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C23	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C24	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C25	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C26	1-124-463-00	ELECT	0.1uF	20%	50V
C27	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C28	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C29	1-124-903-11	ELECT	1uF	20%	50V
C30	1-124-464-11	ELECT	0.22uF	20%	50V
C31	1-126-301-11	ELECT	1uF	20%	50V
C32	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C33	1-126-959-11	ELECT	0.47uF	20%	50V
C34	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C35	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C36	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C37	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C38	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C39	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C42	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C45	1-126-301-11	ELECT	1uF	20%	50V
C46	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C47	1-162-587-11	CERAMIC CHIP	0.039uF	10%	25V
C48	1-126-303-11	ELECT	3.3uF	20%	35V
C49	1-126-925-11	ELECT	470uF	20%	10V
C50	1-126-934-11	ELECT	220uF	20%	16V
C55	1-126-153-11	ELECT	22uF	20%	6.3V
C56	1-126-933-11	ELECT	100uF	20%	10V
C57	1-126-768-11	ELECT	2200uF	20%	16V
C58	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C59	1-126-933-11	ELECT	100uF	20%	10V
C60	1-126-923-11	ELECT	220uF	20%	10V
C61	1-126-154-11	ELECT	47uF	20%	6.3V
C62	1-126-157-11	ELECT	10uF	20%	16V
C63	1-126-952-11	ELECT	1000uF	20%	16V
C66	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C67	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V

MAIN

Ref. No.	Part No.	Description			Remark
C68	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C69	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C70	1-161-473-00	CERAMIC	0.01uF	10%	50V
C71	1-161-473-00	CERAMIC	0.01uF	10%	50V
C73	1-161-473-00	CERAMIC	0.01uF	10%	50V
C74	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C75	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C76	1-163-091-00	CERAMIC CHIP	8PF		50V
C78	1-126-936-11	ELECT	3300uF	20%	16V
C79	1-124-229-00	ELECT	33uF	20%	6.3V
C87	1-126-301-11	ELECT	1uF	20%	50V
C88	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C89	1-126-964-11	ELECT	10uF	20%	50V
C90	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C91	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C92	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C93	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C94	1-124-584-00	ELECT	100uF	20%	6.3V
C95	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C96	1-126-157-11	ELECT	10uF	20%	16V
C97	1-124-927-11	ELECT	4.7uF	20%	50V
C98	1-126-101-11	ELECT	100uF	20%	50V
C101	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C102	1-126-301-11	ELECT	1uF	20%	50V
C103	1-124-584-00	ELECT	100uF	20%	10V
C104	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C105	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C107	1-126-301-11	ELECT	1uF	20%	50V
C109	1-162-587-11	CERAMIC CHIP	0.039uF	10%	25V
C112	1-164-345-11	CERAMIC CHIP	0.082uF	10%	25V
C114	1-124-925-11	ELECT	2.2uF	20%	100V
C115	1-164-345-11	CERAMIC CHIP	0.082uF	10%	25V
C116	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C117	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C118	1-128-054-11	ELECT	22uF	20%	10V
C119	1-130-495-11	MYLAR	0.1uF	5%	50V
C120	1-130-495-11	MYLAR	0.1uF	5%	50V
C201	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C202	1-126-301-11	ELECT	1uF	20%	50V
C203	1-124-584-00	ELECT	100uF	20%	10V
C204	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C205	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C207	1-126-301-11	ELECT	1uF	20%	50V
C209	1-162-587-11	CERAMIC CHIP	0.039uF	10%	25V
C212	1-164-345-11	CERAMIC CHIP	0.082uF		50V
C214	1-124-925-11	ELECT	2.2uF	20%	100V
C215	1-124-464-11	ELECT	0.22uF	20%	50V
C216	1-163-014-00	CERAMIC CHIP	0.0027uF	10%	50V
C217	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C218	1-124-916-11	ELECT	22uF	20%	63V
C219	1-130-495-11	MYLAR	0.1uF	5%	50V
C220	1-130-495-11	MYLAR	0.1uF	5%	50V
		< CONNECTOR >			
* CP5	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P			
* CS1	1-562-882-11	SOCKET, CONNECTOR 12P			
* CS2	1-766-490-11	SOCKET, CONNECTOR 15P			
* CS3	1-564-712-11	PIN, CONNECTOR (SMALL TYPE) 10P			
CS6	1-580-283-11	PIN, CONNECTOR (PC BOARD) 8P			
		< FILTER >			
C64	1-527-937-00	FILTER, CERAMIC			
		< TRIMMER >			
CT801	1-141-245-00	CAP, TRIMMER	30PF		
		< DIODE >			
D1	8-719-049-70	DIODE	SVC323R		
D2	8-719-049-70	DIODE	SVC323R		
D3	8-719-049-70	DIODE	SVC323R		
D4	8-719-800-76	DIODE	1SS226		
D5	8-719-800-76	DIODE	1SS226		
D6	8-719-901-33	DIODE	1SS133		
D7	8-719-981-94	DIODE	MTZJ-2.7A		
D8	8-719-901-33	DIODE	1SS133		
D10	8-719-901-33	DIODE	1SS133		
D11	8-719-901-33	DIODE	1SS133		
D12	8-719-110-14	DIODE	RD9.1ES-B3		
D13	8-719-109-89	DIODE	RD5.6ESB2		
D14	8-719-200-02	DIODE	10E2		
D15	8-719-200-02	DIODE	10E2		
D16	8-719-200-02	DIODE	10E2		
D17	8-719-901-33	DIODE	1SS133		
D18	8-719-921-71	DIODE	MTZJ-9.1B		
D19	8-719-901-33	DIODE	1SS133		
D20	8-719-801-48	DIODE	1SS193		
D21	8-719-901-33	DIODE	1SS133		
D22	8-719-901-33	DIODE	1SS133		
D23	8-719-901-33	DIODE	1SS133		
D24	8-719-921-47	DIODE	MTZJ-5.6B		
D101	8-719-901-33	DIODE	1SS133		
D102	8-719-901-33	DIODE	1SS133		
D201	8-719-901-33	DIODE	1SS133		
D202	8-719-901-33	DIODE	1SS133		
D801	8-719-901-33	DIODE	1SS133		
D802	8-719-901-33	DIODE	1SS133		
D803	8-719-901-33	DIODE	1SS133		

Ref.No.	Part No.	Description				Remark
D804	8-719-901-33	DIODE	1SS133			
D805	8-719-901-33	DIODE	1SS133			
D806	8-719-901-33	DIODE	1SS133			
D807	8-719-901-33	DIODE	1SS133			
D808	8-719-901-33	DIODE	1SS133			
D809	8-719-901-33	DIODE	1SS133			
D810	8-719-901-33	DIODE	1SS133			
D811	8-719-901-33	DIODE	1SS133			
D812	8-719-901-33	DIODE	1SS133			
D813	8-719-901-33	DIODE	1SS133			
D814	8-719-901-33	DIODE	1SS133			
D815	8-719-901-33	DIODE	1SS133			
D816	8-719-901-33	DIODE	1SS133			
D817	8-719-901-33	DIODE	1SS133			
D818	8-719-901-33	DIODE	1SS133			
D819	8-719-901-33	DIODE	1SS133			
		< FILTER >				
F1	1-579-083-11	FILTER, CERAMIC				
F2	1-567-309-11	FILTER, CERAMIC				
F3	1-579-272-11	OSCILLATOR, CERAMIC(456.60kHz)				
		< TUNER UNIT >				
FE1	A-3298-201-A	FM TUNER UNIT				
		< IC >				
IC1	8-759-261-38	IC	LA1875M			
IC101	8-759-046-31	IC	BA328F			
IC103	8-759-206-70	IC	TC4066BF-TP2			
IC501	8-759-039-68	IC	TA8210AH			
IC801	8-759-079-34	IC	uPD1723GF-628-3BE			
		< JUMPER RESISTOR >				
J80	1-216-295-00	METAL CHIP	0	5%	1/10W	
J81	1-216-295-00	METAL CHIP	0	5%	1/10W	
J82	1-216-295-00	METAL CHIP	0	5%	1/10W	
J83	1-216-295-00	METAL CHIP	0	5%	1/10W	
J84	1-216-295-00	METAL CHIP	0	5%	1/10W	
J85	1-216-295-00	METAL CHIP	0	5%	1/10W	
J86	1-216-295-00	METAL CHIP	0	5%	1/10W	
J87	1-216-295-00	METAL CHIP	0	5%	1/10W	
J88	1-216-295-00	METAL CHIP	0	5%	1/10W	
J89	1-216-296-00	METAL CHIP	0	5%	1/8W	
J90	1-216-295-00	METAL CHIP	0	5%	1/10W	
J91	1-216-295-00	METAL CHIP	0	5%	1/10W	
J92	1-216-296-00	METAL CHIP	0	5%	1/8W	
J93	1-216-296-00	METAL CHIP	0	5%	1/8W	
J94	1-216-296-00	METAL CHIP	0	5%	1/8W	
J95	1-216-295-00	METAL CHIP	0	5%	1/10W	
J96	1-216-295-00	METAL CHIP	0	5%	1/10W	
J97	1-216-295-00	METAL CHIP	0	5%	1/10W	
J102	1-216-295-00	METAL CHIP	0	5%	1/10W	
J103	1-216-295-00	METAL CHIP	0	5%	1/10W	
J104	1-216-296-00	METAL CHIP	0	5%	1/8W	
		< COIL >				
L1	1-409-782-11	COIL, CHOKE				
L2	1-409-787-11	COIL, ANT				
L3	1-409-788-11	COIL, RF				
L4	1-409-785-11	COIL, OSC				
L5	1-409-786-11	COIL, IFT				
L6	1-409-783-11	TRANSFORMER, IF				
L10	1-408-559-11	INDUCTOR 4.7uH				
		< TRANSISTOR >				
Q1	8-729-027-80	TRANSISTOR	2SK932-22			
Q2	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q3	8-729-027-80	TRANSISTOR	2SK932-22			
Q4	8-729-900-52	TRANSISTOR	DTC114YK			
Q5	8-729-804-72	TRANSISTOR	2SC2814-F4			
Q6	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q7	8-729-900-52	TRANSISTOR	DTC114YK			
Q8	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q9	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q11	8-729-173-38	TRANSISTOR	2SA733-K			
Q12	8-729-173-38	TRANSISTOR	2SA733-K			
Q14	8-729-900-52	TRANSISTOR	DTC114YK			
Q15	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q16	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q17	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q19	8-729-900-52	TRANSISTOR	DTC114YK			
Q20	8-729-901-46	TRANSISTOR	DTA114YK			
Q21	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q22	8-729-931-15	TRANSISTOR	2SD1858-R-TV2			
Q23	8-729-931-15	TRANSISTOR	2SD1858-R-TV2			
Q29	8-729-207-57	TRANSISTOR	RN1403			
Q30	8-729-805-43	TRANSISTOR	2SC3396			
Q31	8-729-230-49	TRANSISTOR	2SC2712-YG			
Q32	8-729-216-22	TRANSISTOR	2SA1162-G			
Q103	8-729-027-81	TRANSISTOR	2SD1306NE			
Q104	8-729-881-22	TRANSISTOR	2SC2812-L6			
Q203	8-729-027-81	TRANSISTOR	2SD1306NE			
Q204	8-729-881-22	TRANSISTOR	2SC2812-L6			
		< RESISTOR >				
R1	1-216-049-11	METAL GLAZE	1K	5%	1/10W	

MAIN

Ref. No.	Part No.	Description			Remark
R2	1-216-097-00	METAL CHIP	100K	5%	1/10W
R3	1-216-091-00	METAL CHIP	56K	5%	1/10W
R4	1-216-095-00	METAL CHIP	82K	5%	1/10W
R5	1-216-073-00	METAL CHIP	10K	5%	1/10W
R6	1-249-403-11	CARBON	68	5%	1/4W
R8	1-216-075-00	METAL CHIP	12K	5%	1/10W
R9	1-216-037-00	METAL CHIP	330	5%	1/10W
R10	1-216-055-11	METAL GLAZE	1.8K	5%	1/10W
R11	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R12	1-247-727-11	CARBON	10	5%	1/2W
R12	1-249-417-11	CARBON	1K	5%	1/4W
R13	1-247-825-11	CARBON	560	5%	1/4W
R14	1-249-426-11	CARBON	5.6K	5%	1/4W
R15	1-216-073-00	METAL CHIP	10K	5%	1/10W
R17	1-247-883-00	CARBON	150K	5%	1/4W
R18	1-216-077-00	METAL CHIP	15K	5%	1/10W
R19	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R20	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R21	1-216-025-00	METAL CHIP	100	5%	1/10W
R22	1-216-097-00	METAL CHIP	100K	5%	1/10W
R23	1-216-097-00	METAL CHIP	100K	5%	1/10W
R24	1-216-097-00	METAL CHIP	100K	5%	1/10W
R29	1-216-097-00	METAL CHIP	100K	5%	1/10W
R30	1-216-085-00	METAL CHIP	33K	5%	1/10W
R31	1-216-069-11	METAL GLAZE	6.8K	5%	1/10W
R32	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R33	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R34	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R35	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R38	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R42	1-247-751-11	CARBON	820	5%	1/2W
R44	1-216-073-00	METAL CHIP	10K	5%	1/10W
R45	1-216-073-00	METAL CHIP	10K	5%	1/10W
R46	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R47	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R49	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R50	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R51	1-216-196-11	METAL CHIP	820	5%	1/8W
R52	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R53	1-249-417-11	CARBON	1K	5%	1/4W
R56	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R61	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
R62	1-216-097-00	METAL CHIP	100K	5%	1/10W
R64	1-216-073-00	METAL CHIP	10K	5%	1/10W
R65	1-247-855-11	CARBON	10K	5%	1/4W
R66	1-216-097-00	METAL CHIP	100K	5%	1/10W
R67	1-249-426-11	CARBON	5.6K	5%	1/4W
R68	1-216-089-00	METAL CHIP	47K	5%	1/10W
R69	1-216-220-00	METAL GLAZE	8.2K	5%	1/8W
R70	1-216-097-00	METAL CHIP	100K	5%	1/10W
R71	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R72	1-247-727-11	CARBON	10	5%	1/2W
R73	1-216-073-00	METAL CHIP	10K	5%	1/10W
R74	1-247-739-11	CARBON	100	5%	1/2W
R76	1-216-105-00	METAL CHIP	220K	5%	1/10W
R77	1-216-105-00	METAL CHIP	220K	5%	1/10W
R78	1-216-105-00	METAL CHIP	220K	5%	1/10W
R79	1-247-807-11	CARBON	100	5%	1/4W
R80	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R81	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
R82	1-216-073-00	METAL CHIP	10K	5%	1/10W
R83	1-249-417-11	CARBON	1K	5%	1/4W
R84	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R87	1-216-194-00	METAL CHIP	680	5%	1/8W
R88	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R89	1-216-254-00	METAL CHIP	220K	5%	1/8W
R90	1-216-073-00	METAL CHIP	10K	5%	1/10W
R91	1-216-091-00	METAL CHIP	56K	5%	1/10W
R92	1-216-097-00	METAL CHIP	100K	5%	1/10W
R93	1-216-121-00	METAL CHIP	1M	5%	1/10W
R94	1-216-097-00	METAL CHIP	100K	5%	1/10W
R95	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R96	1-216-075-00	METAL CHIP	12K	5%	1/10W
R97	1-216-073-00	METAL CHIP	10K	5%	1/10W
R98	1-216-089-00	METAL CHIP	47K	5%	1/10W
R101	1-216-017-00	METAL CHIP	47	5%	1/10W
R102	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R103	1-216-097-00	METAL CHIP	100K	5%	1/10W
R104	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R114	1-216-089-00	METAL CHIP	47K	5%	1/10W
R117	1-247-839-11	CARBON	2.2K	5%	1/4W
R118	1-216-113-00	METAL CHIP	470K	5%	1/10W
R119	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R120	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R122	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R123	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R124	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R127	1-249-417-11	CARBON	1K	5%	1/4W
R128	1-247-871-11	CARBON	47K	5%	1/4W
R130	1-249-422-11	CARBON	2.7K	5%	1/4W
R201	1-216-017-00	METAL CHIP	47	5%	1/10W
R202	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R203	1-216-097-00	METAL CHIP	100K	5%	1/10W
R204	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R214	1-216-089-00	METAL CHIP	47K	5%	1/10W
R217	1-247-839-11	CARBON	2.2K	5%	1/4W
R218	1-216-113-00	METAL CHIP	470K	5%	1/10W
R219	1-216-057-00	METAL CHIP	2.2K	5%	1/10W

SEE ADDITIONAL INFORMATION

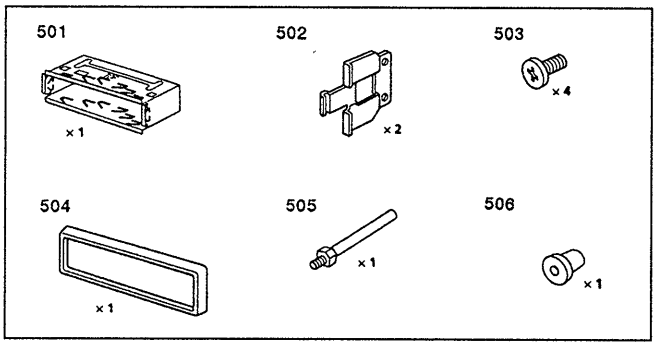
MAIN SWITCH

Ref.No.	Part No.	Description	Remark
R220	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R222	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R223	1-216-298-00	METAL CHIP 2.2 5% 1/10W	
R224	1-247-839-11	CARBON 2.2K 5% 1/4W	
R230	1-249-422-11	CARBON 2.7K 5% 1/4W	
		< VARIABLE RESISTOR >	
SVR1	1-228-994-00	RES, ADJ, METAL 10K	(AM AUTO-SCAN STOP LEVEL)
SVR2	1-228-999-00	RES, ADJ, METAL 470K	(FM STEREO SEPARATION)
SVR3	1-228-996-00	RES, ADJ, METAL 47K	(FM STEREO SEPARATION)
SVR4	1-228-999-00	RES, ADJ, METAL 470K(LIMITER SENS)	
SVR5	1-228-995-00	RES, ADJ, METAL 22K	(FM AUTO-SCAN STOP LEVEL)
VR301	1-223-722-11	RES, VAR(VOL/POWER SW)	
VR302	1-237-790-11	RES, VAR, CARBON 10K(BAL)	
VR303	1-237-729-11	RES, VAR, CARBON 100K/100K(TONE)	
		< SWITCH >	
SW1	1-571-796-11	SLIDE SWITCH (FM200K/50K, AM10K/9K)	
		< CRYSTAL >	
X801	1-760-413-11	VIBRATOR, CRYSTAL(4.5MHz)	
**********			
*	1-653-359-11	SWITCH BOARD	
		**********	
		< JUMPER RESISTOR >	
J98	1-216-295-00	METAL CHIP 0 5% 1/10W(XR-1600)	
J99	1-216-295-00	METAL CHIP 0 5% 1/10W(XR-1600)	
		< PILOT LAMP >	
PL1	1-517-334-11	LAMP, PILOT(BACK LIGHT)(XR-1600)	
PL2	1-517-334-11	LAMP, PILOT(BACK LIGHT)(XR-1600)	
PL3	1-517-334-11	LAMP, PILOT(BACK LIGHT)(XR-1600)	
PL4	1-517-334-11	LAMP, PILOT(BACK LIGHT)(XR-1600)	
		< SWITCH >	
S1	1-762-056-11	SWITCH, KEYBOARD(1)(XR-1600)	
S2	1-762-056-11	SWITCH, KEYBOARD(2)(XR-1600)	
S3	1-762-056-11	SWITCH, KEYBOARD(3)(XR-1600)	
S4	1-762-056-11	SWITCH, KEYBOARD(4)(XR-1600)	
S5	1-762-056-11	SWITCH, KEYBOARD(5)(XR-1600)	
S6	1-762-056-11	SWITCH, KEYBOARD(6)(XR-1600)	
S7	1-762-056-11	SWITCH, KEYBOARD(M•SCAN/A•MEN)(XR-1600)	
S8	1-762-056-11	SWITCH, KEY BOARD(BOOST)(XR-1300)	

Ref.No.	Part No.	Description	Remark
S8	1-762-056-11	SWITCH, KEYBOARD(LOUD)(XR-1600)	
S9	1-762-056-11	SWITCH, KEYBOARD(DSPL)	
S10	1-762-056-11	SWITCH, KEYBOARD(FM/AM)	
S11	1-762-056-11	SWITCH, KEYBOARD(SEEK +)	
S12	1-762-056-11	SWITCH, KEYBOARD(SEEK -)	
S13	1-762-056-11	SWITCH, KEYBOARD(MANU +)	
S14	1-762-056-11	SWITCH, KEYBOARD(MANU -)	
**********			
		MISCELLANEOUS	
		**********	
13	1-765-568-11	CORD (WITH CONNECTOR)	(including F901,902)
273	3-916-081-01	SWITCH MODULE, POWER	
F901	1-532-422-11	FUSE 6.3A/125V	
F902	1-532-417-11	FUSE 2.0A/125V	
HP901	1-543-976-11	HEAD, MAGNETIC (PLAYBACK)	
M901	3-916-079-01	MOTOR ASSY	
S902	1-572-712-11	SWITCH, SLIDE (FWD/REV)	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-765-568-11	CORD (WITH CONNECTOR)	(including F901,902)
	3-758-683-41	MANUAL, INSTRUCTION, INSTALL(ENGLISH/SPANISH/CHINESE)	
	3-758-684-41	MANUAL, INSTRUCTION(ENGLISH/SPANISH/CHINESE)	
*	3-914-409-01	CUSHION (UPPER)	
*	3-914-410-01	CUSHION (LOWER)	
*	3-914-411-11	INDIVIDUAL CARTON(XR-1600)	
*	3-914-414-11	INDIVIDUAL CARTON(XR-1300)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-770-87	SCREW +PTT 2.6X5 (S)	
#2	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT(XR-1600)	
#3	7-682-145-01	SCREW +P 3X4	
#4	7-621-773-87	SCREW +PTT 2.6X10 (S)	
#5	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT	
#6	7-627-556-08	SCREW +P 2.6X2.8	
#11	7-624-102-04	STOP RING 1.5, TYPE -E	
#12	7-624-104-04	STOP RING 2.0, TYPE -E	
#13	7-621-255-15	SCREW +P 2X3	
#14	7-627-553-38	SCREW, PRECISION +P 2X3	

Ref. No.	Part No.	Description	Remark
#15	7-628-253-15	SCREW +PS 2X5	
#16	7-628-253-95	SCREW +PS 2.6X4	

MOUNTING HARDWARE



501	X-3368-723-1	FRAME ASSY, FITTING
502	3-913-037-01	SPRING, FITTING
503	3-329-814-01	SCREW (M4X6), SPECIAL PAN (+)
504	3-913-036-01	COLLAR
505	3-386-828-01	SCREW, FITTING
506	3-349-410-01	BUSHING

9-959-554-11

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XR-1300/1600

SONY

SERVICE MANUAL

E Model

CORRECTION-1

Correct your service manual as shown below.

____ (Under line) : indicates corrected portion.

Page	INCORRECT			CORRECT		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
33	VR301	1-223-722-11	RES, VER (VOL/POWER)	VR301	1-223-982-11	RES, VER (VOL/POWER)

(SPM-96043)

9-959-554-91

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